

JUN 19 1929

*The American Journal of*  
**CLINICAL  
MEDICINE**

*Dependable Therapeutic Fact for Daily Use*

NOVEMBER

MCMXIX

**WE HAVE A HUNCH**

**T**HAT this issue of CLINICAL MEDICINE is a pretty good one, dealing, as it does, with a great variety of topics of interest to practitioners. Of course, influenza comes first; that is something we are bound to consider. Then the question of antiseptics, used both externally and internally. We are wondering what physicians will think about Doctor McCready's internal use of chlorazene.

Next month there will be an equally interesting program.

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A MONTHLY JOURNAL

DEVOTED TO ACCURACY, DEPENDABILITY AND HONESTY IN EVERY DEPARTMENT OF MEDICINE  
AND TO THE SAFEGUARDING OF THE DOCTOR

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# *The American Journal of* **CLINICAL MEDICINE** *Dependable Therapeutic Fact for Daily Use*

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## The Flow of Bile

WE are often asked as to what is the best means of promoting the flow of bile in simple jaundice. The answer depends a good deal upon the cause of the jaundice. The old idea, that jaundice is a disease, is dying hard. This writer recalls an instance in his early practice where he lost the patronage of a family because an older doctor most unfairly played upon the popular ignorance on this subject. When the family asked his opinion as to what was the matter with the patient, he promptly answered, "Jaundice," although he knew very well that, in naming what is merely a symptom, he was not making a diagnosis, but, simply was dodging the issue. The writer had taken a day or two to diagnose between gallstones and catarrh of the bile-duct, and the family thought he must be an ignoramus, if he did not recognize jaundice when he saw it.

In the condition known as "biliousness," and in catarrh of the bile-duct or in any condition where congestion is the chief factor, any treatment that will reduce congestion will be beneficial. This is why

laxatives salines are valuable. A course of small doses of calomel or blue mass repeated every hour for six doses, followed by a free use of a laxative saline or compound of such, constitutes excellent treatment for this condition.

Lauder Brunton, with his usual clearness and simplicity, goes to the root of the matter. He says:

"The liver has a twofold action—it *forms* bile, which is poured into the duodenum; and it also *excretes* the bile that has been reabsorbed from the duodenum and carried back to the liver by the portal circulation. Much bile thus circulates continually between the liver and the duodenum, while part is carried down the intestine with the feces, and its place supplied by newly formed bile.

"When the quantity circulating in this way is too great to be completely excreted by the liver, it enters the general circulation and produces symptoms of biliousness. These are removed by the so-called cholagoges, which probably act by stimulating the duodenum and thus carrying the bile

so far down the intestine as to interfere with its reabsorption.

"Among the best cholagoges, are the preparations of mercury, which do not increase the secreting power of the liver nor augment the quantity of bile formed by it. Their utility is greatly increased by combination with a saline purgative, which still further clears out the intestine and completely prevents any reabsorption of bile. Other cholagoges, such as podophyllin; rhubarb and aloes actually increase the secretion of bile by the liver. At the same time, they probably prevent its reabsorption in a similar way as mercurials and salines."

As synergists, there undoubtedly is value in leptandroid, euonymoid, chionanthoid, and the bile salts, although this writer has found their action uncertain in some individuals.

The stream of plenty will not flow toward a stingy, parsimonious and doubting thought.

#### THE SALVATION-ARMY HOME SERVICE CAMPAIGN

During the week of September 22 to 29, the Chicago Salvation Army Home Service Campaign was conducted, with the cordial cooperation of businessmen and women, of professional men and women, of soldiers, and of many others to whom the Salvation Army has endeared itself through its splendid war-service. We are informed that the hoped-for million and one-half was not realized, and that, therefore, the plans for the future, of the Salvation Army, must be modified along rather less ambitious lines. That is a great pity; for, the greatest ambition of this organization is, to be of service. I mean, of actual, concrete, bread-and-butter service, clothes-service, job-service, encouragement-service; in short, of any real, honest-to-goodness service that may be needed. It's not talk, nor merely good advice; it is real, straight, usable service that the men and women of the Salvation Army are giving; and want to give, far more than they have been able to. Therefore, they need, and they deserve, all the help that can be given to them.

Let's see what they want. The purposes of this campaign, which, by the way, is but a part of the nation-wide campaign, are:

1. To provide adequate funds for all Salvation Army activities in Chicago, for

one year, including the erection of such new buildings as are immediately necessary for the work.

2. To do away with all soliciting by officers of the Salvation Army during the year (except for the annual "Self-Denial" appeal for foreign missions)—thus enabling them to devote all their time to Service Work proper. [Note that spelling, in capitals, of Service Work. This point appeals to us with particular force.—Ed.]

3. The Home Service Work of the Salvation Army has suffered greatly during the war. This special effort is necessary to reinstate the Army in sound financial condition to undertake all the Home Service obligations for one year. The income of the Salvation Army in past years has not been nearly adequate to meet all its home-service needs. In addition, there have been tremendously increasing calls arising from the popular and effective work of the Army in the war.

There now. Let us remember that this campaign is not only to benefit Chicago, but, that it is a part of a nation-wide movement. Of the fact that the Salvation Army is deserving of all that it asks, there can be no doubt; there are no differing opinions expressed. Since we are of one accord in this point, is it not up to us physicians, as much as it is up to business men, and all other classes of people in the United States, to help, with money as far as we are able; and, then, by word of mouth, by securing the contributions of others?

The work of the Salvation Army concerns physicians closely, and physicians take part, active part, in many of its phases. Therefore, it is our work, also. Let's go.

#### THE RED CROSS DRIVE

The third roll call of the American Red Cross will take place from November 2 to 11, and the organization then hopes to raise its membership to at least twenty million. If this splendid enrollment can be secured, it will provide the American Red Cross with over twenty million dollars with which to carry on its important work. Considering the scope and importance of the activities of the American Red Cross, the fullest support should be granted to this organization, which not only was instrumental, in its own part, in winning the war but also accomplished much to lessen the horrors of the recent world-upheaval and to

heal the wounds left by it, as far as this can be done.

By all means, let us join the Red Cross as paying members and let us give according to our means, for, every cent that is contributed will accomplish good and will help in some great work.

#### IF YOU DON'T AGREE WITH US—WHAT?

There comes a good brother who requests us to cancel his subscription to *CLINICAL MEDICINE*, informing us that he is absolutely opposed to universal military training "under the present capitalistic rule and for the purpose intended by those advocating it". There is much more on the small space of the postal card on which this physician voices his disagreement with our position. The point is, that he decided to give up the journal because it contained an editorial article favoring a movement of which he personally disapproved.

Now, here's a fine state of affairs. Of course, this good doctor has a perfect right to read or not to read *CLINICAL MEDICINE* or any other journal, as he chooses; also, he has a right to agree or to disagree with any or all of the opinions voiced in the articles printed in it. But, to discontinue his subscription because he disapproves of our editorial opinion on a matter that does not directly concern the professional interests of the physicians—surely, that suggests a degree of intolerance that must arouse one's pity.

It is supposed that every thinking man and woman reads the daily papers and one or more monthly periodicals. It hardly can be assumed that we agree with everything that is printed in these publications, either editorially or with editorial sanction. Would it then be reasonable to condemn these publications simply because they print-

ed opinions at variance with ours? What utter nonsense! If everybody in a family, or in a community, or in a country were to agree on everything, that would by no means constitute the millennium. On the contrary, it would mean utter and hopeless stagnation and inevitable retrogression. It is not only by competition but also through difference of opinion and the attempt to prove one's own position as superior that progress is made. Nor can political problems be solved by closing our eyes to and refusing to hear of solutions and undertakings that are not to our liking. The opinions of others should be accorded the same respectful hearing that we expect for our own and a wide degree of tolerance and letting-the-other-fellow-have his say should prevail.



### One of a Million—You! Volunteer for RED CROSS

**Enlist now for the Third Roll Call. Twenty Million members are to be enrolled November second to eleventh, inclusive. Your heart, your hand, your dollar is needed in order to keep the pledge abroad and to fulfill demands at home. Give one week's service to Humanity—it pays your conscience the biggest dividend on Americanism.**

It can safely be stated that there is no field for the pessimist in the practice of medicine. This is preeminently a sphere of activity exclusively for the optimist.—Northwest Medicine.

#### CENTENARY OF THE STETHOSCOPE

During the present year, there is being celebrated

the centenary of the discovery of mediate auscultation, by means of the stethoscope elaborated by Laennec, the noted French clinician, whose monograph on pulmonary consumption is one of the classical and truly memorable treatises on this important subject.

In his "Epoch-making Contributions to Medicine, Surgery and the Allied Sciences," Dr. C. N. B. Camac, on page 157, gives the date of the first French edition of Laennec's work as September, 1818. However, in an article on Laennec and his stethoscope, contributed to *The Medical News* for May 20, 1905, Camac says that it was not until 1819 that the long-delayed publication, in book form, of his methods was accomplished, although his method of auscultation actually dates from the year 1816, as Laennec records himself, and his method had really been communicated by

him to a number of medical societies in Paris.

The discovery, that it was possible, by means of an instrument of any kind, to ascertain the exact nature of the respiratory and cardiac sounds and to determine normal conditions and deviations from them, naturally constituted a step forward in the investigation of diseases, more particularly of the chest-organs, the importance of which can hardly be realized. It was not only certain esthetic considerations that led Laennec actually to use a paper tube when being "consulted by a young woman, laboring under general symptoms of heart disease, in whose case percussion and the application of the hand were of little avail, because of the great degree of fatness," but, it was the fact that the chest-sounds can be perceived much more clearly and distinctly than is possible by the immediate application of the ear to the chest. This fact constitutes the notable discovery of Laennec, through which the clinical study of chest diseases and, incidentally, of many other conditions where the stethoscope now is used, has been immensely advanced. It is well to look back occasionally and to realize what those who went before us had accomplished; and to appreciate and acknowledge the debt that we owe them.

Laennec stands out as one of the greatest students of pulmonary consumption. His treatise on the diseases of the chest and on mediate auscultation gave the impetus to a renewed and enthusiastic investigation of pulmonary tuberculosis. Moreover, it was owing to Laennec's observations that the curability of this disease was recognized and it is because of him that its pathology was investigated with increased energy and persistence.

So, then, let us honor the memory of those that have preceded us and pointed the way. Let us, during this year, especially, honor the memory of Laennec, who, himself, a victim of pulmonary consumption, accomplished so much for the benefit of mankind, despite his physical handicap.

Have no fear of any sort or shape, for fear is an adjunct of the minus entity.—"The Magic Story."

#### WE DO NOT HAVE TO AGREE

Decidedly, we do not have to agree with everything that we print in the way of signed articles in the columns of CLINICAL

MEDICINE. Indeed, it happens often enough that we accept articles for publication, and print them, too, with the opinions of which we certainly are not in accord. We are ever mindful of the fact that CLINICAL MEDICINE is the practitioners' journal; it is an open forum before which they may express their views and voice their different and differing convictions.

Take as an example several articles on influenza printed in the "Let's Talk It Over" department. The infectious nature of influenza is denied and, as a logical corollary, the necessity of quarantine is questioned. We, personally, have repeatedly gone on record as being convinced that the disease has a bacterial etiology and out of this the wisdom of isolation follows logically. It is very true that other factors are active, such as atmospheric conditions, and especially, fear, crowding, and serious nervous disturbances all of which manifested themselves during the war. Indeed, we believe that these "predisposing" factors contributed greatly in making last year's epidemic as severe and serious as it was. Nevertheless, the agency of pathogenic bacteria in causing the catarrhal and inflammatory manifestations of the disease is too clearly evident to be denied.

All that, however, can not induce us to deny others, who think differently, an opportunity to express their opinion.

We ourselves are responsible for the opinions expressed in the editorials and also for those in the editorial comments, while, for all signed articles, the authors themselves bear the responsibility, our share being limited to having granted permission for their contributions to be printed in CLINICAL MEDICINE.

#### INTRAVENOUS MEDICATION

Here is a good subject for a number of useful articles. We should like to know what success physicians in general practice have had with the intravenous administration of certain potent drugs that are applicable in this manner.

We should like to have information on those drugs that can be used intravenously; on the indications for their use; on the technic that was found most successful; on necessary precautions; on the experiences and observations under such treatment. Physicians having experience with the in-

travenous administration of remedial agents might loosen up and tell the rest of us what they have done and what they have seen. Let's have some good articles, please.

As no roads are so rough as those that have just been mended, so no sinners are so intolerant as those that have just turned saints.—Colton.

### THE COST OF FAILURE.

It is a common belief, says Samuel Lile, in the *International Journal of Surgery*, for August, that the price of surgical failure is paid only by the patient and relatives and that the operator goes scot free. This is not so, for, the surgeon often pays a heavy price for operative failure or unsatisfactory results. When the surgeon asserts that he is as much hurt by failure as the patient or his friends, there is often more justice in the conditions than anyone will admit.

The public is well aware of the consequences of an unsuccessful operation from the patient's point of view, but practically never so from the surgeon's standpoint. Doctor Lile refers to the fact that no general commanding an army ever underestimated the psychic element in warfare, what is known as the morale, and that it is contended that no army is beaten until it believes itself beaten. That is to say, as soon as an army loses faith in itself, it ceases to be a factor for victory. The same thing must be said of the surgeon. A single failure often brings dire results, the most important and deplorable one being the loss of self-confidence.

Without self-confidence a surgeon is as helpless as an army without confidence. Successful surgery requires extreme vigilance, clear knowledge, perfect self-reliance, careful coordination and supreme presence of mind; while failure to be thus equipped, often but for a brief space of time, may spell disaster. A surgeon's reputation is always at stake and once injured can not be repaired.

All this might have been extended truly to medical men in general. It is one of the many ancient jokes, being repeated constantly, that medical men bury their mistakes and short-sighted people seem to think that with the burial all consciousness of a mistake or failure is erased from the physician's mind. There never was a greater mistake. Physicians, like surgeons, are as keenly disappointed and as seriously

injured in their "morale" by failures as are any other workers who are conscientious in their activities. We remember one man, a bright young physician, who refused to give a single further anesthetic, although he was a valued and experienced anesthesiologist, after having seen three patients die in rapid succession on the table. We remember a tuberculosis physician who for a long time could not bring himself to undertake an artificial pneumothorax after having lost one patient within two minutes after compression of the lung. These are surgical instances. But, we have often witnessed and ourselves experienced the heartburning and futile self-disgust that followed a fatal outcome in a case of disease where one had been confident to bring about a cure. Every physician, of even slight experience, has experienced the same sickening and heart-breaking depression after losing a patient by death whom he had hoped to save.

It is not only the moral cost of failures that physicians, like surgeons, have to defray. Failures usually reflect unfavorably upon the confidence with which medical men are consulted by their clients. Fortunately for us, people demand of us that we shall do our best and usually there are good souls who condone our failures by referring to the inscrutable will of God. Yet, we personally often have our doubts and it is humiliating to think that, if we had done so and so and refrained from doing this or that, perhaps a certain patient might have been saved. Sometimes the consciousness of failure remains vivid with us for long periods. Sometimes it never leaves us. No, it can not be said that physicians bury their mistakes. Usually they pay for them dearly and in many ways.

### COOPERATIVE MEDICINE

There is a story in the Gospels about a woman who "had suffered many things of many physicians and had spent all that she had and was nothing bettered, but, rather, grew worse." This story sometimes is made use of to the discredit of physicians, but, to this day, it finds its counterpart in many instances in which patients change from one physician to another, without remaining in any one's care for a sufficiently long time to receive any benefit, for the simple rea-



son that not one of the physicians consulted is given an opportunity to study the case, and to establish in sufficient detail a definite and satisfactory diagnosis, much less to formulate and administer a suitable course of treatment.

While many patients seem to take pride in reciting their experience in the course of their years of peregrination from one physician's office to the other, they do not seem to realize that their habit of constantly changing medical advisors can not but result to their own disadvantage. Ordinarily, physicians are tempted rather to congratulate themselves when such people have left them for other medical attendants, knowing full well that no satisfaction can be obtained, no matter how willing they may be to enter into their clients' cases carefully and to give them the best advice possible.

However, as physicians are or should be not only healers but also teachers, it is meet to consider sympathetically and carefully a suggestion laid down by Doctor Van Becelaere in *The Detroit Medical Journal* for May. The Doctor introduces his remarks by referring to several patients that had had previous attention at the hands of other physicians and in the case of some of whom the information relating to such previous attention was absent, while in that of others it was supplied, and thus, necessarily, resulted in distinct advantage to the patients themselves, by facilitating the Doctor's investigations.

Doctor Van Becelaere asserts that records of case-histories, of technical examinations, such as uranalyses, blood examinations, Wassermann tests, X-ray examinations, and such, should be available, on request, to any physician to whom the patient in question has applied for treatment. This, the Doctor urges, certainly is true for patients that have paid fees for examinations and reports; and he believes that even hospital-records should not be privileged and that the argument of "private possession" does not hold. He fails to discover any valid reason why, in a given case, a patient affected, for instance, with ununited fracture should be compelled, every time he changes physicians, to have a new radiograph made to order for his latest attendant.

Doctor Van Becelaere refers to the Battle Creek plan (he might have mentioned

also the complete routine examinations made in the institution of the Brothers Mayo), according to which prospective patients are passed along and sifted over by several examiners, each an acknowledged specialist in his chosen line, and in which manner a complete inventory of the patients' physical liabilities and assets is made possible, in other words, a complete and careful diagnosis is made, on the basis of which the best possible course of treatment can be outlined.

The Doctor advocates a plan according to which patients seeking professional treatment should, first of all, call upon a diagnosing specialist, or, a specialist in diagnosis, one that makes it his business to ascertain the nature of the disease and who even may, perhaps, outline a plan of treatment, for which latter, however, the patient is referred to that man or a group of men most competent to secure the desired results.

Of course, this is nothing more or less than what we have become accustomed to talk about as "group-medicine." At least in the cities, and even in many towns of smaller size, the benefit to be secured from multiple examinations, so to speak, at the hands of several physicians, each one with special qualification, are made accessible to the patient, and, after complete and painstaking examination, a course of treatment is outlined that, in most cases, bids fair to be successful.

The present writer always has been rather in favor of this sort of procedure. Any man who has been in practice for five years or longer is painfully conscious of the fact that it is extremely difficult, if not impossible, in many instances, to extend, unaided, the examination of a certain patient and the investigation of his or her case as widely as might be desirable and as he would like to do, for the benefit of the sick person.

It may be doubted whether there exists any physician who arrogates to himself such all-embracing knowledge that he feels perfectly competent to diagnose clearly and definitely any case that may be presented to him. In most instances, an examination by various men, followed by a consultation as to existing conditions and as to the best means for their relief, undoubtedly would offer the best results. Such a thing might be feasible in cities and towns were it not



for the seemingly unavoidable jealousies, small bickerings, and taking advantages that exist among physicians as much as among other people. Yet, if only it were possible, it would be a mighty fine thing for the patient.

Incidentally, Doctor Van Becelaere suggests that such cooperation among physicians might be for their own great benefit. Besides his clinical record, every new patient presenting himself should be obliged to show a "release" from his previous medical attendant, indicating, among other facts, that the person's bill is paid, or, if not, why not. The Doctor relates that he, himself, has collected directly from such patients bills due to previous attendants and remitted to the proper address such sums as still were due for past services.

Here is a plan that might be made to work well under certain circumstances. If all physicians, say, in a certain town, could bring themselves to forget their little personal jealousies and selfseekings, if they could make up their minds absolutely and without reservation to cooperate with all their colleagues, to play fair sturdily, and to unite with them for the purpose of giving the best-possible services to all the patients of the town, the results, we conceive, would be splendid. Suppose we talk this over. Maybe it is a pipe-dream. Yet, we refuse to admit that physicians, as a class—the finest bunch of men and women living and belonging to the most-altruistic calling in the world—can not find a *modus operandi et vivendi* by which they can materially benefit their clients and, incidentally, themselves.

Fortune is ever elusive and can only be retained by force. Deal with her tenderly and she will forsake you for a stronger man.—"The Magic Story."

#### A HOSPITAL-NUMBER

One of these days, we should like to get out a hospital-number, and we want to know what the readers of CLINICAL MEDICINE think about it; also, whether they will contribute to it.

We want articles on all sorts and conditions of hospitals; big hospitals and small ones; public, semipublic, and private; on the construction, the management, the cost, and everything appertaining to the subject.

Whether we ever get out this number, depends upon you. If any of you doctors

wish to see such a number, sit down and tell us about it; also give us your contributions. When we have enough material, the special number will be published.

#### THE TUBERCULOSIS-PROBLEM

Decidedly, our minds run in cycles. Time was, before the bacteriological era, when pulmonary consumption was attributed to virtually everything that could cause illness in man. There scarcely was a malady that was not believed to lead to consumption sooner or later—except, perhaps, those affections associated with the "rheumatic" or "gouty" disposition. There was not a single cause of illness, in the old-time view, that was not believed to lead, in many cases, to a "decline."

With the discoveries in bacteriology, especially with the investigations of Villemin as to the infectious nature of tuberculous products, and with Koch's discovery of the bacillus of tuberculosis, a complete change of front took place. It was asserted in all seriousness that, whenever a human organism is infected with the tubercle-bacillus, that is to say, whenever it harbors the tubercle-bacillus, it necessarily becomes tuberculous. This, by the way, was disproved very soon and the necessity of other predisposing factors soon was acknowledged more especially by clinicians in opposition to bacteriologists.

However, in the campaign against tuberculosis that took its inception in the nineties of the last century and has been vigorously waged ever since all over the world, the contagious and communicable nature of tuberculous disease was emphasized to such an extent that the public became frightened, like children of the bogey-man, and that a great fear was engendered in the minds of people, so much so that serious wrong was done, not alone to the victims of active tuberculous disease, but fully as much to those that had recovered from it. They were outcasts and viewed with suspicion as much as were the lepers of ancient time.

It was a revelation when, in 1907, the experiments of von Pirquet with the allergy-tests—first, with the skin-test for tuberculosis—showed conclusively (what had been understood, in a way, through the results of necropsy-investigations during several years preceding) that possibly eighty

percent and sometimes even more of the population carried in their system latent, or dormant, tuberculous foci and, therefore, tubercle-bacilli.

With this discovery, the pathogenesis of tuberculosis entered a new phase and it came to be realized that the tubercle-bacillus alone is not capable to lead to actual clinical tuberculous disease, but, that the cooperation of other pathogenic germs, particularly of pus-bacteria, is necessary; and thus, in a way, we came back to the old view that whatever can render man ill—or, in other words, can lower his resistance—is capable of causing him to acquire tuberculous disease by affording, through the lessened resistance, a favorable culture-soil for the pathogenic germs, tubercle-bacilli associated with others, that he might harbor on the mucous membranes, more especially of his respiratory passages.

Owing to the widespread distribution of all these bacteria, the conclusion was unavoidable that it is virtually impossible to escape infection, and it came to be realized, as Doctor Palmer put it epigrammatically in a paper read before the American Medical Association last June (*Jour. A. M. A.*, Sept. 27, p. 985) that success will come through our learning how to live with the tubercle-bacillus rather than in striving to avoid initial infection.

We rarely have read an article on the pathogenesis and the prevention of tuberculosis that puts the problem as clearly and lucidly as does this one. Doctor Palmer shows, what, to be sure, has been proved years ago, that the relationship between infection and disease is very remote. That is to say, the mere fact of an infection does not mean that disease is inevitable. It is entirely a question of predisposing influences that cause an infection to eventuate in disease.

Moreover, while, during the twenty years since the inception of the tuberculosis-campaign, the tuberculosis mortality has decreased, from 238 per hundred thousand population, to 166 per hundred thousand, (a decrease of 30 to 25 percent), and, while, during the past fifteen years, the decrease in five-year periods has been 22.2 percent, it must not be forgotten that, during the twenty years preceding the anti-tuberculosis-campaign, the mortality from tuberculosis decreased, from 339 per hundred thousand population, to 245 per hun-

dred thousand, or a decrease of about 27.5 percent. Indeed, during something more than one hundred years, that is, since 1812, when the tuberculosis death rate was close to 450 per hundred thousand, the decrease in tuberculosis-mortality has been steady and continuous.

It is evident, therefore, that the diminished tuberculosis-mortality is not a consequence, entirely, of the lessons taken from the recognition of tuberculosis as a communicable disease, but, rather, that improved sanitation and hygiene and better conditions of living in general have contributed their full share.

The tuberculosis-problem, therefore, is not solely a bacteriological one, but, it is one that concerns the sanitarian, the hygienist and dietetist, the social worker, fully as much as it does the physician, and, indeed, all these agencies have to cooperate in order to bring about an even greater and more decided diminution of the frequency and mortality of tuberculous disease.

Whether one is by disposition and practice an optimist or pessimist is a determining factor in his success in business or profession. Everyone is familiar with the good cheer and general hopefulness radiating from one who habitually looks on the bright side of daily life, in contrast with the depression and gloom from one who continually magnifies the dark side.—Northwest Medicine.

#### FAIR DEALINGS

An editorial in a recent number of *The American Trade Association Journal* contains the following passage:

"A successful salesman does not have to knock his competitors. If his competitors have anything on him, he must be able, at all times, to combat it with high-grade salesmanship, be able to present his line to his customers so convincingly that the doctor forgets about the cheap price or cheap deal the other fellow has to offer.

... There is only one way to do business, and that's on the level. Once you get the confidence of the doctor, the battle of salesmanship is half over."

Let's apply this the other way 'round—to the relations between physician and patient. It, surely, is true that a successful physician does not have to knock his competitor in any way whatever; neither outright by deliberately blackening the competitor's name, ability, standing, and so forth; nor indirectly by damning him with faint praise or by shrugging of shoulders and admitting magnanimously that, some

day, he will be a pretty good doctor; nor by innuendo or cussed and ill-natured comment.

There is nothing quite so damnably rotten mean as the way in which some physicians talk about their competitors and—more's the pity—the way some old established practitioners are guilty on every count on which they might be indicted in this particular respect.

In small towns and in country places, especially, physicians seem to take it as a personal insult if another man, say, a recent graduate, settles down and opens an office for the practice of his profession. There is, at once, the fear of losing patronage; the apprehension that some of his patients and clients may desire to "change doctors." This may be dictated by an uncomfortable consciousness of sins of omission or commission, a memory of some little carelessness or of some error, a reminiscence here and there of dissatisfaction expressed by various patients; and it is dictated, also, by the well-known craze of certain members of every community to patronize the latest comer among the local physicians.

Let us remember how fiercely we, ourselves, resented the attitude of the older physicians if this was unfavorable; how grateful we were for the kindly support of those older men that were not jealous of every case that might come our way, who actually aided us with counsel and advice, and who, perhaps, put a case in our way here and there, possibly a night-visit or an obstetric case, who called upon us for assistance in surgical work and otherwise did us innumerable little kindnesses.

In the doctor's everyday life and practice, invidious remarks concerning his competitors always are in wretched taste and are quite certain to reflect to his disadvantage, like the well-known chickens coming home to roost. Some years ago, when the present writer first began to review books, his superior in the editorial office counseled him somewhat in this way: "If you can not say anything nice about a book, say nothing, unless it contains manifestly wrong and misleading statements. If that is the case, castigate them fearlessly, but, do not sneer or speak unkindly."

That is good advice to be followed by physicians in their relations among each other, and this includes any remarks they may make to friends or patients, about

their competitors. If you can not speak appreciatively and kindly about your competitors, for heaven's sake, keep still! Any sneering or unkind remarks, surely, will come home and react to your own disadvantage. Any physician who has to resort to backbiting in order to keep his patients is to be pitied, because his patients must be of a character anything but desirable.

Man should not be blinded to whatsoever merit exists in the opportunity which he hath in hand, remembering that a thousand promises for the future should weigh as naught against the possession of a single piece of silver.—"The Magic Story."

#### DRUG-ADDICTION MADE REPORTABLE: SPECIAL HOSPITAL FOR DRUG-ADDICTION

In *The Weekly Bulletin* of the Department of Health of the city of New York, for August 9, it is reported that, at a meeting of the board of health of that city, held July 22, 1919, the following resolution was adopted:

"Resolved, that Section 1 of the sanitary code be and the same is hereby amended by adding thereto a new subdivision, to be known as Subdivision 47, to read as follows:

"Pestilential Disease: Shall be deemed to include the conditions and symptoms resulting from the habitual use of habit-forming drugs, and known as drug-addiction."

Since the adoption of stringent laws and regulations relative to the use of narcotic drugs, the difficulties of the drug-addicts have become very great.

This is true, particularly, in those states in which the legislatures have passed regulations that are even more stringent than those of the federal government. *The Weekly Bulletin* referred to in the foregoing points out that, for New York (and the same is true for other large cities), the greatest need in connection with the drug-addiction question is, the opportunity for special institutional care for those victims that require it. But, for this, facilities are totally inadequate throughout the entire country.

We learn with much interest that, as the result of negotiations with the Secretary of the Navy, conducted by the Mayor and the Commissioner of Health, permission has been obtained for use of buildings, no longer needed by the Navy, at the Pelham

Bay Training Station, and, within a brief period, accommodations for 1,000 patients will be arranged therein. The plan of treatment provides for those that can be rapidly cured of the habit through reduction of dosage, and, as the location and surroundings at Pelham Bay are such that it will be possible to guard against smuggling of drugs to patients, striking results are anticipated.

Ask of no man permission to perform.—"The Magic Story."

#### HOW OTHERS SEE US

Of course, the war happily is over and our intense activities in France are now in process of being wound up. So, the quotation from a little French medical periodical, that we wish to reproduce in the following, might be worded in the past tense. However, if we consider that it was published in November last, we shall appreciate the things that the author, Dr. Henri Bouquet, says about us. In *Le Monde Médical* for that month, the following remarks appear:

"The principal feature of the assistance that the United States has contributed to the great war for liberty is, no doubt, its amplitude. All the figures that have been given us concerning the numbers of soldiers sent to Europe, their supplies and their material, savor of the gigantic. The Army Medical Service of our allies could not but follow suit. As a matter of fact, it is fully up to the mark, as I can certify from my personal knowledge, having recently had occasion to visit one of the four big "base hospitals" now built in regions which the Censor forbids me to name. Each of these four centers is made up of 20 hospitals (all comprised on the same grounds, which measures some 14 or 15 kilometers in circumference), each structure intended for the reception of 2,000 men, 30 surgeons, 100 female and 200 male nurses. If we sum this up, we will find that this entire enterprise represents four towns of 46,000 inhabitants that have sprung up on our territory. This, too, independently of the innumerable buildings that have been requisitioned, by the American army, to serve as ambulances and hospitals here, there, and everywhere.

"In sooth, one's imagination turns giddy in trying to form a concrete idea of this

effort on the part of the United States, whether we view it from the point of view of dollars, of men or of material. When one has the good fortune to get within sight of the reality in any one sector of this immense program, one can not but be struck by the extreme order with which everything is executed and, passing from the infinitely great to the infinitely little, one is seized with astonishment at the scrupulous attention to detail that has presided over this rather fantastic plan. Everything has been foreseen in its uttermost detail and one hospital that I might name is provided with everything that can possibly be of use to the wounded or sick soldier from the time of his admission to the date of his discharge. Foreseen, that goes without saying; but, the interesting feature is, that, in order to steer clear of any obstacle and at the same time to obviate the necessity for asking anything from us European nations, who have already done so much for ourselves, everything has been brought from overseas.

"Not to wander from the medical domain, let us look at this wagon for the transport of the wounded, as well as this cylinder of oxygen, this incubator or those microphotographic slides, this kitchen-oven or that packet of foot-powder, and you may be sure that you will find the label of some firm in New York or Chicago or the mark of a Detroit factory. In the central warehouse of each aggregation, there are stored 100,000 rations, and the supply is being maintained at this level, not to speak of a few hundred in each of the hospitals.

"I have nothing more to say to my confrères with respect to the installation that I have been permitted to visit. A hospital is the same everywhere. The rules of surgical intervention are identical for the Americans as for ourselves. There, no doubt, are differences of technic to be found; however, to do that, would take me too far afield in such a brief chronicle of the condition. I merely wish to note, in passing, how, in each department the United States takes a wide, complete, comprehensive view, yielding a total effort the effects of which were splendidly manifested as soon as the soldiers of America, "the home of the free," took their places at the sides of our incomparable armies which, for now four years, have by themselves defended the supreme interests of the world."

# Leading Articles

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## Influenza, Pneumonia and Hydrotherapy

### Low Mortality By Use of Rational Hydrotherapy and Practical Methods of Administration

By EDWARD THOMAS SECOR, M. D., La Grange, Illinois

**T**HERE have been published so many articles on influenza-pneumonia, including the careful study of the disease, its pathology, symptomatology, and so forth, that it would seem supererogatory to attempt to add to this information; yet, as the high mortality rate presumably indicates, there is something lacking in the prevailing therapy.

At present, the medical fraternity is quite prone to await phenomenal results from untried vaccines, serums, and the like, and to neglect the thorough use of the tried and efficient although more laborious methods.

It seems to be the consensus that, in a certain percentage of influenza-cases, pneumonia will supervene and that a certain number of these will prove fatal, regardless of drug-therapy and good management.

Statistics of cases in which drug-therapy alone has been relied upon seem to bear out this idea; however, I find that, when rational hydrotherapy is added to not too much drug-therapy, the results have been extremely gratifying.

It is only the demonstrated powerful effects of hydrotherapy, which are recognized as the most effective of all measures known for combating diseases, in addition to my desire to bring this measure into more general use for the control of this so often rapidly fatal condition, that cause me to ask a hearing. My personal results are based upon more than 500 cases in general private practice during the past autumn and winter. These were so divided, as to class

and living-conditions, as to tally with those occurring in any average general practice, namely:

60 percent mixed suburban and rural population of all ages living under middle- and better-class conditions.

20 percent Italians living under medium conditions.

10 percent Swedish students of an average age of about eighteen years.

10 percent Negroes living under medium conditions.

#### Success of Hydrotherapy

Out of this group of patients, in only 2 percent there occurred any extensive degree of pneumonia. In these cases, the condition had attained a good headway before treatment was instituted, but, even so, only one terminated in death. This patient came under observation with a well-advanced and rapidly developing lung-condition and the patient was extremely cyanotic and comatose before hydrotherapy could be brought to bear, and, although we were gaining air-capacity and the patient's general condition showed improvement, there was, besides the influenza-pneumonia, also a status epilepticus; and death ensued under an overwhelming seizure.

I find that hydrotherapy has been employed elsewhere during this epidemic, and with similarly gratifying results. At the Battle Creek Sanitarium and other similar institutions where hydrotherapy is the chief standby and where the nurses are skilled in its proper application, the low percentage of well-developed pneumonias and the



low mortality compare favorably with my results.

In my opinion, the time of intervention, when the maximum benefit may be derived from the minimum treatment, is in the pre-pneumonic stage, with its mucopurulent bronchitis, which has but to advance to the peribronchial lung-tissue, and, by rapid direct extension, eventuate in bronchopneumonia, with its associated congestion and edema. If the patient comes under treatment during this stage or even a little later, but, before too large a portion of the lung has become involved, the results are, as a rule, so excellent that one is apt to consider that he was unduly alarmed by the earlier findings.

It is only by comparing several hundred cases, treated in this manner, with a similar number treated by other methods that one can fully realize the actual benefits derived therefrom. When the early râles disappear and the temperature drops, you can not say that you have cured an attack of pneumonia; still, it is safe to say that you have met it on the way and, by controlling the situation, have prevented its development.

It is unwise to delay treatment in this condition, for, after a massive pneumonia is well developed, the patient will be in need of many times as much treatment, to get results, as would one with a beginning condition; and skilled nursing is altogether too scarce to be squandered.

My method has been, to note, in my daily rounds, those cases showing suspicious or advancing râles, and one of my nurses that followed me would treat these patients; ordinarily, they could be dropped in two or three days after one or two treatments daily, varying with severity or degree of involvement.

Those patients that were in a more advanced state were removed to the hospital where treatments could be given, even three or four times daily when urgency demanded.

#### General Management

The patient is kept in bed in a well-ventilated room, and permitted just as little physical exertion as is absolutely necessary, until he has had no rise of temperature for two or three days.

The intestinal evacuation is established, and maintained throughout the illness, by

means of calomel, citrate of magnesium and similar agents, enemas, and so on.

The diet is confined to milk and fruit-juices.

Upon the appearance of extensive lung-involvement, the patient is raised to a semisitting position and kept thus until this condition is overcome. Analgesics of the salicylate variety are used when aching is severe, but, only just enough to afford partial relief, and then only when there is very little pulmonary involvement. No opiates are permitted, under any condition, if they can possibly be avoided; and this is possible by having recourse to hydrotherapy, even in severe pleurisy.

From actual observation, I have noted the failure of hydrotherapy in cases that would be considered good risks, and this simply because the patients were receiving opiates liberally. I am afraid to use expectorants in these cases and prefer that the nonproductive cough be controlled by combining hydrotherapy with warm medicated vapor-inhalations. For this purpose I use compound tincture of benzoin or tincture of tolu in the way to be described further on.

The cardiovascular system is assisted when necessary and the general condition is treated symptomatically.

I have used iodized calcium freely almost as a routine measure where there has been considerable bronchial involvement. This seems to modify the cough and to aid absorption in a very satisfactory manner.

In my opinion the high mortality in this epidemic was, to an unusual extent, a consequence of too much and poorly advised drug-therapy, most especially the too free use of opiates, coal-tar derivatives and expectorants.

We hear much for and against the use of bacterins in this condition. I have used mixed influenza and pneumonia bacterin for immunization but cannot measure its value. I have also used these same preparations as a therapeutic measure in some of those cases coming under my care with a temperature around 106, a single dose usually resulting in a rapid drop in temperature and, I truly believe, a more speedy recovery.

In using large doses of bacterin in these critical cases I have always sought for a capillary control by an intravenous injection of digitalin prior to the use of bacterin



for fear that the rapid capillary dilatation might prove serious.

Many have held the cardiovascular activity as being chiefly at fault in this condition.

In the effort to overcome this cardiovascular failure, digitalis and allied agents have been freely used but with apparently disappointing inefficiency.

The apparent lack of therapeutic value of the preparations used was perhaps due not so much to the inertness of the drug as to the unusual extent to which it was expected to act.

This element of disappointment may be entirely overcome by giving only reasonable attention to the cardiovascular system in general and concentrating greatest efforts upon that portion where the pathologic process is most apparent.

There is far less uncertainty in the results obtainable by the physiologic therapeutic route and especially in those conditions where local applications are indicated to meet local pathology.

#### Hydrotherapy

Hydrotherapy is in my opinion the sheet anchor not only in preventing the development of pneumonia but also in determining that these pneumonias will not prove fatal. By a skillful application, pulmonary venous congestion which is about to take place may be overcome by producing an active hyperemia. The more rapid and free circulation thus established through the diseased area produces a local increase in leukocytes and absorption of exudate.

There is an underlying principle in hydrotherapy which governs the external area to be treated for a definite internal effect, certain skin areas being reflexly associated with certain internal viscera. The circulatory effect produced in these skin areas is analogous to the effect at the same time produced in the associated viscera.

The chief associated skin areas for lung treatment extend over the entire chest surface, thus, we make our application to this entire region.

The mode and manner of application is an all important factor in the accomplishment of a definite physiological action. The same temperature applied for the same length of time to the same individual may produce a very different result when applied in a skillful, dexterous manner, from

what it would if applied in a makeshift, bunglesome fashion.

The procedure of choice when treating either an early or advanced condition is, alternate applications of heat and cold. To obtain this effect to best advantage, I use fomentations and ice, or, where ice is not procurable, in its place real cold water can be substituted and applied a little longer, although this is less efficacious.

The nurse should be provided with eight fomentation cloths which may be made by cutting a double blanket into eight equal parts once lengthwise and four times across. The blanket material should be three-quarters wool and fairly heavy. She should also have two large bath towels, a large bucket of water and a smooth piece of ice as large as can be well grasped in the hand.

*Technic.*—With the gown removed, the patient is lying on the back with chest exposed. One folded towel is placed under the patient's shoulders to absorb any excess of moisture. Now, one of the fomentation cloths is spread out upon the table near the stove where the bucket of water is kept boiling, a second fomentation cloth is folded once and the ends are grasped one in each hand. The central portion is immersed in the boiling water to such a depth that when removed the wet portion will extend within a few inches of the ends, the dry portions at the ends permitting wringing without burning the hands. This method of wringing fomentation cloths produces a dryer cloth and in shorter time than when using the time honored stupe wringer. After thoroughly wringing until there is no dripping, this cloth is spread in two thicknesses across the center of the dry cloth on the table and the sides of the dry cloth are folded over to envelop the wet one; the wet and dry combination is then quickly turned over, folded once endwise and tightly rolled together, a second is prepared in the same manner and the two are unrolled and applied simultaneously to the back and front of the entire chest. The patient lies back upon the posterior application and the anterior fomentation is covered with a dry bath towel. In a few seconds, the patient will complain of the fomentation burning, due to an accumulation of steam between the skin and the first cloth. This may be relieved by quickly passing the hand between the cloth and the skin thus allowing the steam to escape. This

may have to be repeated several times to give the desired relief. Another set of two fomentations is prepared in the same manner and taken to the bed side. Three or four minutes have elapsed since the first applications were made and they are no longer real hot. The patient, if able, assumes a sitting posture and, removing the posterior application, this area is quickly gone over with ice the moisture dried off and a second fomentation is applied. The patient resuming the former position, the anterior application is removed, the part gone over with ice and the second fomentation is applied. A third and often a fourth is made in like manner, finishing with ice. After drying the skin, the chest is protected by a well fitting flannel jacket which should be worn between treatments. Whether a third application is sufficient or a fourth is necessary in a given case, may be determined by the degree of skin reaction or redness displayed at the site of treatment. This reaction is necessary if one is to expect a corresponding internal reaction, therefore, if three changes are not sufficient, a fourth should be made.

#### As to Reaction

There is a great difference in the degree and rapidity of reaction in different subjects and also a marked difference depending upon the skill and dexterity with which the applications are made.

A patient who reacts well usually may be considered a short case requiring little treatment and vice-versa.

The pain of acute pleurisy as well as the pathologic process may be greatly controlled by the fomentation omitting the ice in that region during the more acute stage, but, after this stage is passed, the alternate hot and cold will aid greatly in the absorption of the exudate.

The various known hydrotherapeutic procedures for controlling high temperature are indicated in influenza as elsewhere.

It might be mentioned that, not infrequently, immediately following the half-hour treatment with alternate hot and cold, the temperature drops a degree and almost without fail the patient feels better.

If the first opportunity for hydrotherapy comes after the pulmonary venous congestion is well advanced or is making unusually rapid progress, the local treatment may be greatly assisted if preceded by a hot hip

and leg pack, one of the most efficient derivative measures used in hydrotherapy.

The pack should include feet, legs, thighs and pelvis reaching slightly above the crests of the ilia.

*Technic*—Spread a double blanket on the bed, adjust a cold compress to the patient's head. A hot foot bath is also a good preliminary measure if convenient.

Fold a single blanket or, still better, a double blanket, endwise. This folded blanket is grasped by two assistants and wrung out of boiling water until quite dry then quickly unfolded and spread over the blanket on the bed.

The patient, without delay, the gown having been removed, is assisted to lie on the hot blanket in such a position as to make it possible to quickly envelope the above mentioned parts.

The blankets are snugly wrapped about the parts so that the wet one comes in contact with all skin surfaces and the dry one covers in to retain the heat.

Six one-quart fruit jars containing hot water are distributed to the parts under treatment one thickness of dry blanket coming between the jars and the wet blanket. In half an hour the patient should be removed from the pack one leg at a time and the parts as removed gone over with a cold-mitten friction to retain the blood in the limbs; thus maintaining derivation secured by the hot pack.

These measures, while comparatively simple, require a little effort; however, this is far exceeded by the end results.

*Contraindications*—There are, in my opinion, no contraindications as patients with a weakness which must be guarded against, whether cardiac, renal, or what not, are those most in need of the efficient life saving qualities of hydrotherapy and their treatment should receive a little extra attention, if possible, and be pushed a little harder than in the average case so as to save the weakened organism.

The necessary improvised apparatus for giving the medicated-vapor inhalations mentioned above consists of a teakettle, a heavy-weighted cup which is placed inside the teakettle, a long paper funnel the small end of which is of proper dimensions to fit over the spout. The teakettle with about an inch of water is brought to the boiling point on the stove and then kept steaming at the bed side, in the absence of

a better arrangement, by an improvised stove made by supporting a hot flat-iron bottom side up between two bricks. After the teakettle is in position and the paper funnel attached, a teaspoonful of compound tincture of benzoin or tincture of tolu is placed in the dry cup and the medicated vapor may be inhaled at the large end of the funnel. This may be continued for half an hour or longer and repeated several times a day if necessary. It is seldom that a patient objects to these inhalations and they seem to soothe the irritated respiratory tract. I have been fortunate during this epidemic in having at my disposal a corps of competent nurses skilled in hydrotherapy. It is possible, however, for any apt assistant possessing the attributes of dexterity and dependability to become proficient in this portion of hydrotherapy, with a little instructions and practice; but, it is unsafe to ask the average nurse to give such

treatment without first seeing to it that she has suitable appliances and correct working knowledge which, unfortunately, is seldom possessed by even the best-trained hospital nurse.

Even a nurse who has had training in hydrotherapy often must be instructed to put a little snap into her treatments. Hot must be hot and cold must be cold and changes must be quickly made and at the right time to get results.

The average nurse trained in hydrotherapy is accustomed to treat chronic conditions of the kind frequently met with at institutions where hydrotherapy receives greatest attention; but, while these conditions call for the same snap and accuracy in order to obtain more than a psychic effect, she often gets into a rut and becomes slovenly in her treatments. Such treatment doubtless will hasten the end in a case of influenza-pneumonia.

## The Chlorine-Compound Chlorazene

### Its Use as an Internal Remedy in General Practice

By J. W. McCREADY, M. D., New York City

IN THE fall of 1914, Dr. Henry D. Dakin, of New York, began his experiments, at the Rockefeller Laboratory, with the chlorine-compounds; and we all know of the wonderful results he obtained and the many lives that were saved during the recent European war by the production and use of these compounds.

In this country, the chlorine-compound chlorazene has been in general use, during the past three years, as in an antiseptic in the dressing and irrigation of wounds and in various diseases of the eye, nose, throat, urethra, and bladder.

But, it is my opinion that chlorazene has even a greater value, as an internal remedy, as a disinfectant and antiseptic of the alimentary tract.

Thirty years ago, at Randall's Island Hospital, we used chlorine-water in the throats of diphtheritic and scarlet-fever patients, to dissolve membranes and necrotic tissues; but, of late years, chlorine has fallen into disuse. In fact, it was almost forgotten, until recently revived by the experiments of Dakin, Dunham, and

others. During the past eight months, I have used chlorazene, in more than one hundred cases, as an internal remedy in various diseases of the intestinal tract and have been more than pleased with the results.

So far as I know, very little is known regarding the action of chlorine internally. But, in December, 1918, there appeared, in the *Paris Médical*, an article on chlorazene as an intestinal disinfectant, by P. Carnot, M. D., and Th. Bondouy, M. D., of Paris. Their experiments were very interesting, showing that chlorazene is a nontoxic substance, a deodorant as well as disinfectant and possessing the power of decomposing toxins, and well borne in the digestive tract.

These experiments were largely carried on, in the laboratory, with the various digestive secretions; but, several cases were, at the same time, reported where chlorazene had been given to hospital-patients where they desired to disinfect the intestinal canal and deodorize the stools, as in gastric distress, acute enteritis, bacillary

dysentery, and affections resulting from the group of typhoid-organisms. The results, in some of these cases, were remarkable and the symptoms cleared up rapidly.

Chlorazene appears to be more stable than the other chlorine-compounds and exerts a more prolonged antiseptic action. In the stomach, the gastric juice decomposes chlorazene slowly and a quantity of chlorine is given off, which unites with water, to form hydrochloric acid, and sets free oxygen.

In order still further to prolong this action, it is best to combine chlorazene with an insoluble or feebly soluble substance. I have used bismuth subnitrate for this purpose, or charcoal, as a vehicle, and for its well-known power of absorption.

In gastrointestinal indigestion, pepsin and pancreatin can be combined with chlorazene where it is suspected that these digestive secretions are deficient. I have used this combination with good results. I do not think that the power of digestion is interfered with when chlorazene is used without these digestives, as I often use just a carrying agent, such as willow-charcoal, and have had splendid results.

#### Illustrations from Practice

For example, in the case of man sixty-five years old, who had been a sufferer from attacks of acute indigestion for years and had never been relieved by any of the ordinary remedies excepting a hypodermic of morphine, was promptly relieved by chlorazene, gr. 3-4, and willow-charcoal, gr. 10, in powder. This patient remarked later that he could not understand why I had never given him this medicine before; and now he takes one of the powders after dinner at night and says he never has any more bad attacks.

Case 2: Miss O. fifty-four years of age, chronic gastritis, with ulceration of the stomach. This case has been treated by me, for years, with medicine, and I had washed out her stomach many times with antiseptic solutions. The silver preparations ichthargan, argyrol, and solargentum (Squibb's) were all tried and they were of some benefit; but, nothing has done her so much good as chlorazene. It was in this case that I first used chlorazene as an internal remedy, and by accident rather than by experiment.

This lady had an atrophic nasopharyngitis, as well as a gastritis, and, one day

while spraying her nose and throat with a solution of chlorazene, she accidentally swallowed some of the solution and at first was very much alarmed; but, I assured her that it would not do her any harm and that, in fact, it might be a good thing for her stomach.

I gave her some chlorazene tablets and told her to dissolve two of them in a glass of warm water and spray her nose and gargle the throat and swallow a little of the solution each time. In one week, the patient returned, looking and feeling much better, and told me that her stomach was fine; that it had not been so good in years. The local treatment was kept up, but, I gave capsules of chlorazene, gr. 1-2, with lactopepton, gr. 6 and charcoal, gr. 5; one such to be taken after each meal. And the improvement was remarkable.

Case 3: A case of acute auto-intoxication. Mrs. C., 35 years old, was taken sick suddenly with vomiting, headache, pain in the back and limbs, had abdominal pains, was constipated. Temperature 103.8° F., pulse 92, respiration normal, marked depression. Blood pressure under 100. I gave a cathartic and irrigated the bowels. I then gave her capsules of chlorazene, gr. 1-2, with charcoal, gr. 6, one to be taken every six hours. The next day when I called, the nurse reported that the patient had abdominal pains during the night, so, could not sleep much, but, did not vomit as often as before and had not vomited during the past six hours. Temperature was 102 degrees. Abdominal distention was well marked and there was tenderness on pressure.

The patient was given a high irrigation of alum-water, and she expelled a quantity of gas, with mucus and some undigested food. I left an order for the irrigations to be repeated twice a day and the chlorazene capsules to be continued. A large amount of indican was found.

Third day: Temperature was 101.8° F., at 4 a. m., but, was down to 99.4 degrees when I called at noon. The patient had slept six hours during the night and woke up hungry, so, the nurse gave her a cup of coffee, and, three hours later, a cup of chicken-broth. There was very little abdominal distention or soreness. Treatment continued as before.

Fourth day: Patient had slept all night. Temperature, normal; abdominal symp-

toms had cleared up, so, the treatment was discontinued, excepting that one capsule was to be taken after dinner each day.

Fifth day: The nurse called at my office with a sample of the urine and reported that the patient was feeling fine and that her services were no longer required. Examination of the urine did not show a trace of indican.

In many cases of autoinfection treated with chlorazene, I have found the distressing symptoms to clear up in two or three days.

Case 4: This will illustrate this last point. Mrs. P., aged 42, called at my office, and gave the following history: Four weeks ago, she began to have headache, muscular pain, indigestion, a tired, languid feeling, and constipation. She thought she had muscular rheumatism and went to Mt. Clemens and took the baths for three weeks. She had just returned and was feeling no better; in fact, worse, as the baths had weakened her and she still had all of the other symptoms. My diagnosis was, autointoxication, and this was confirmed by the examination of urine, which showed indican in excess. I gave her, in capsule, chlorazene, gr. 3-4; charcoal, gr. 10; one such four times a day for three days. All her symptoms cleared up.

During the influenza-epidemic of last winter and this spring, we had many complications and, in the majority of cases, the intestinal tract was affected. In pneumonia, there was, in almost every case I treated, an intestinal indigestion, and, in all of such cases, I used chlorazene with good results.

Case 5: Young man, 22 years of age. Had influenza, with pneumonia as a complication. On the fourth day of the pneumonia, he developed toxic symptoms. He had a mild form of delirium, from which he could be roused up enough to answer questions slowly, but, with great difficulty. The abdomen was distended and tympanic. I had the nurse give a high irrigation of alum-water, and left a prescription for chlorazene, gr. 1-2, with charcoal, gr. 10 in each capsule, one of these to be given every three or four hours. Oxygen inhalations, as required.

Next morning, the patient's friend, Doctor B., called at my office and informed me that he thought my patient was going to die, that he had just been over at the hospi-

tal and had examined him. The Doctor asked whether I had any objection to his calling in a Doctor K., a friend of his, in consultation. To this, I readily assented and met the two doctors that day at the bedside of the patient. Doctor K. thought that, while the patient was very sick with pneumonia, he did not think there was any cause for alarm at that time, but, that, owing to the toxic symptoms, probably originating from the intestinal tract, recovery would be very slow, and that, in such cases, he had given serum with good results. Camphor in oil was suggested by the other doctor. I thanked them for their good advice, but, saw no reason for a change of treatment, so, continued as before. The patient made a good recovery, leaving the hospital ten days later.

Case 6: A prominent merchant, 64 years of age, was brought home to New York from the country on a Saturday evening sick with ptomain-poisoning from eating oysters. He had a subnormal temperature, heart's action very weak and irregular, vomiting, cold extremities, headache, dryness of mouth and throat, abdominal cramp-like pains. He gave a history of having been sick for three days and, during this time, he had voided 83 watery stools with blood and mucus.

The patient told me that it was absolutely necessary for me to cure him quickly, as he was obliged to be downtown at his office on Tuesday morning, even if he had to be carried down. The time was less than three days, so, I started treatment at once, giving him calomel and ipecac in small doses every twenty minutes, also, a high irrigation; and wrote for chlorazene, gr. 3-4, charcoal, gr. 10, such a capsule to be given every six hours. Much to my surprise, the patient recovered promptly and kept his engagement at his office on Tuesday morning. In this great city of ours, every person wants quick action for his money, even in medicine. The next case will illustrate this point.

Case 7: A man, 33 years of age, sick with gastrointestinal indigestion. In this case, I should like to give you the history just as it was given to me in the patient's own phraseology, as it is rather unique, with a dash of rough comedy in spots.

#### A Patient's Own Story

The man called at my office one morning before eight o'clock and told my office-boy



that he must see the Doctor at once. I rushed in and asked him whether he had been in another auto-accident, as he drives a Ford and takes lots of chances and has been in many a mixup. His reply was, "Stop kidding. I am in a hurry and them capsules you gave me, as big as my thumb, was no good and I had a helluva time trying to swallow them at that, and now I want some medicine in powders, strong enough to kill or cure. I do not want this thing to become chronic!—everything I eat turns to gas and I bloat all up and then explode at both ends."

On the patient's first visit, I had given him a digestive powder, 20 grains in a 00 capsules. This time, I gave him chlorazene, gr. 3-4, charcoal, gr. 10, lactopepton, gr. 10, in each powder: to take one after each meal, with water, as the medicine would be a little hot. I cautioned him, knowing that the chlorazene would give off chlorine when it came in contact with the saliva in the mouth.

A few days later, meeting him upon the street, I asked him about the gas, and he said that I had "cooked the gas all right." but, that he had to take as much water as a chaser to get the powder down as he did "with a drink of the poor whiskey they were selling nowadays." He shook hands when we parted and remarked that he

"thought I was a good doctor," but, that I had "a poor way of giving medicine."

As to the use of chlorazene, at least, I think this patient was right, and will admit that I know but very little regarding the elegance of pharmacy and even less about chemistry. During my experiments with chlorazene, I tried many mixtures, both in solution and powder; some appeared to be compatible, but, more were incompatible; until, at last, I decided upon the digestive powders, bismuth subnitrate and willow charcoal. And, just here, I wish to acknowledge, with thanks, my indebtedness to Schaaf Bros., druggists, of 2151 Eighth Avenue, New York, for assisting me with my experiments.

Many of the druggists in New York City and surrounding towns refused to fill my prescriptions, without first calling me up on the 'phone, when I wrote for chlorazene, and, for that, I could not blame them, as the drug was not then known as in internal remedy.

Last April, I wrote for information to the Abbott Laboratories. In reply, they told me that they were greatly interested in my experience with chlorazene. That they were working on a preparation of chlorazene for internal use, but, had not put it on the market, and were waiting for further clinical reports before doing so.

## Spinal Anesthesia

By PROF. VICTOR PAUCHET, M. D., Paris, France

THERE are two convenient procedures for producing anesthesia, namely, rectal narcosis with a mixture of oil and ether, and spinal anesthesia. The indications for these two methods are not the same. It is not possible, under rectal anesthesia, to operate upon an abdomen when the intestines are distended, while during spinal anesthesia the abdomen is retracted and thus performance of laparotomy facilitated.

Spinal anesthesia may be employed for three different forms of anesthesia, namely: *a*, general; *b*, high (affecting ab-

domen and pelvis); *c*, inferior (affecting peritoneum and lower limbs).

For general anesthesia, Jonesco's method may be employed. However, I prefer the method of Le Filliatre, who injects a solution of 5 centigrams of cocaine in to the lumbosacral space, and recommends the removal of 20 to 30 mls. (Cc.) of cephalospinal fluid. This method has yielded great service during the war, because it has permitted operating after a single anesthetic injection upon patients with numerous wounds. Thus, upon the same subject, I have performed trephining and resection of the elbow, and fitted a leg-appliance. The analgesia lasts

\*Translated from *Gazette des Hopitaux* for April 19, 1919.



from one hour to one and one-half hours.

For anesthesia of head and neck and for most of my operations, I much prefer local and regional anesthesia (Pauchet et Sourdat: "Anesthésie Régionale").

For high anesthesia and low anesthesia, I use a full or half of an ampule of the anesthetic.

#### Indications

Spinal anesthesia is indicated in the major operations on the abdomen, pelvis, and lower limbs (as, for instance, amputation, exarticulation; resection of the knee, the thigh, the hip; high extirpation of the rectum, hysterectomy for cancer, gastrectomy for adherent ulcer, intestinal occlusion). For the last-named operation, spinal anesthesia improves the prognosis, for, it causes the intestine to contract, makes the abdominal wall more limber, and does not, during the narcosis, endanger the life of the patient by stercoraceous vomiting.

As spinal anesthesia is not quite as safe as regional or local anesthesia, I am of the opinion that it is not quite proper to employ it for simple operations for which local anesthesia suffices; such as, for instance, hemorrhoids, varicocele, perineorraphy, amputation of the foot, osteotomy of the femur, prostatectomy, craniectomy, goiter, cancer of the tongue, and so on.

Among one hundred operations, I resort about fifty times to regional or local anesthesia, about ten times to inhalation-narcosis, fifteen times to spinal, and twenty-five times to mixed anesthesia.

**Requirements.**—A syringe holding 3 mils; two or three needles for lumbar puncture, with mandril and short cutting-edge; a graduated glass; tincture of iodine; ampules of a cardiac tonic containing camphorated oil, and sparteine or strychnine; also, ampules containing powdered novocaine (procaine), which is to be dissolved in the cephalospinal fluid when beginning the lumbar puncture.

**Precautions.**—The subject's ears are to be stopped up, the eyes must be bandaged, and silence is to be maintained. These are useful precautions.

One hour before the operation, inject, hypodermically, the contents of one ampule each of a solution of hyoscine-morphine and of a cardiac tonic.

**Asepsis.**—The asepsis that is observed for spinal anesthesia must be as perfect as

in the case of bone-suture. The operator should paint his fingers and the back of the subject with iodine. The instruments must be sterile and placed in a sterile container.

**Position of the patient.**—The patient may be recumbent or sitting up. In the latter case, he will sit bent forward. For high abdominal operations (stomach, liver, kidney) the head and pelvis should be elevated, so that the middle of the back is in a sloping position. In the case of a child, the body should be bent so that head and knees touch, while the back rests on the table. This position is to be maintained for three or four minutes.

#### The Puncture

An intervertebral space is selected in the median line, either dorsal lumbar or lumbosacral, or between two lumbar vertebrae. For operations in the upper abdomen, advise dorsolumbar puncture. For operation on the peritoneum or on the lower limbs, lumbosacral puncture. The latter space is large and accessible in the median line at an equal distance from the iliac crests and the posterior inferior iliac spine.

The needle is introduced slowly at the median line. At a certain point a resistance is felt, but, which yields. The needle pierces the "drumhead" and enters into the subarachnoid space. The liquid flows out.

#### Quantity of Spinal Fluid to Be Removed.

—In case the tension is slight, abstract 10 mils; if it is strong, it is necessary to remove from 25 to 30 mils, the fluid to be collected in a graduated glass (Le Filliatre). The first drops are caught in the ampule that holds the anesthetic powder and is mixed with it. In order to ensure perfect solution, gentle heat may be employed.

#### Amount of the Anesthetic to Be Injected.

—For operations on the stomach and liver, the entire contents of the ampule "Corbière" are to be used. It contains 9 centigrams of novocaine (procaine). The analgesia sometimes extends as high up as the neck and endures seventy-five minutes. The surgeon will adjust the dose to the seriousness of the operation. It will be less for an operation upon the uterus than for one upon the stomach, and still less for an operation upon the thigh or the foot or the peritoneum. In the latter case, the puncture may be lumbosacral, and one-third of the contents of the ampule will suffice.

#### Technic of Making the Injection

The 3-mil-syringe is filled with the solution of the anesthetic powder in the cere-

brospinal liquid, and the solution is injected slowly. Then cephalospinal liquid is aspirated and reinjected two or three times, in order to produce what is called "barbottage" of the fluid in the spinal canal. Let the patient cough, in order to promote the mixing up. Making the injection must take up several minutes.

*Failures.*—*A. The liquid does not flow out*, because the needle has struck a nerve or has entered the epidural space or a lump of fat. In this case, introduce the mandril, withdraw the needle one millimeter or push it further. If, despite these maneuvers, the liquid does not flow, the operation should be done over in the upper or the lower interspinous space, but, not into the same.

For such a second puncture, another needle must be employed.

*B. Blood flows.*—In this case, the needle is in a vein. The mandril must be replaced and the needle pushed forward or withdrawn slightly. If blood continues to flow, another needle must be used for puncture in the interspinous space above or below.

*C. The liquid flows slowly.*—The cutting-edge of the needle is stuck in the dura mater. If injections are made under these conditions, the solution remains in the epidural space, and the patient is badly anesthetized. Moreover, the barbottage is impossible, and, for this reason, anesthesia is unsatisfactory. The best procedure is, to undertake another puncture in the space above or below with a new needle.

*D. Anesthesia is absent or incomplete.*—In this case, the injection has been made into a vein or into the epidural space; or, also, the solution of the powder in the cephalospinal fluid has not been complete.

#### Accidents

*A. Retention of urine.*—This may persist for several days.

*B. Vomiting.*—This is rare after the operation. If it does occur during the operation, cold-water compresses are to be placed upon the neck. (Walther).

*C. Sciatic neuralgia.*—This may occur if the operator has introduced his needle outside of the median line and has pierced the nerves. It never persists.

*D. Headache.*—This is a frequent accident. Antipyrin may be given. If the pain is severe, lumbar puncture should be done. With good technic, this accident is rare.

*E. Fecal incontinence during the operation.*—The patient will empty the rectum

spontaneously. This is disturbing in the case of complete abdominal hysterectomy. The feces may enter the vagina. The nurse should be instructed not to give an enema on the morning of the operation, and to tampon the vagina. The patient should not be purged on the day before the operation, but, on the day before that. Liquid diet must be ordered from the time that a purgative is given until the operation is done.

*F. Asphyxia because of bulbar inhibition.*—The anesthesia extends so high up that the respiratory center is anesthetized. If the brain is intact, the patient must be instructed to blow or he should be made to speak constantly. After the puncture is made, an assistant should direct the patient to breathe, for the first five minutes, deeply through the nose.

I have observed three cases of bulbar inhibition, and in which it was necessary to perform artificial respiration for one minute, for ten minutes, and for fifteen minutes, respectively.

*G. Cases of paraplegia* or ocular paralysis are but very rare and transitory.

I do not believe that this accident can occur if the puncture is made according to the indications given in the foregoing.

*H. Death.*—Death follows rarely, but, it may supervene, as it does with chloroform. Spinal anesthesia is not less serious than is chloroform-anesthesia. Patients in a state of shock or greatly weakened by infection bear spinal anesthesia but poorly.

I consider spinal anesthesia to be a convenient method, one which improves the prognosis in a large number of operations, yet, which is subject to as many risks as is inhalation-narcosis. The surgeons who never have had any accidents are those who apply it with a ritualistic rigourousness and who do not subject badly shocked or excessively weakened patients to it.

#### Summary

Spinal anesthesia may present several immediate points of danger, but, which are very slight. On the other hand, it has no injurious action upon the lungs, nor upon the liver or kidneys. It permits, with but slight shock, the carrying out of traumatic operations, such as resection of the hip and amputation of the thigh in wounded. It renders the major abdominal operations less severe, because of its producing contraction of the intestine, softening the abdominal wall, and stopping flatus. Hysterectomy for uterine cancer or laparotomy

for acute intestinal obstructions are better carried out and, therefore, less dangerous under spinal anesthesia than under general narcosis.

This method has gained ground considerably during the last few years and will certainly continue to grow in favor in the future.

## After Thirty Years—XIX

### Notes and Reflections on Life and Work

By WILLIAM RITTENHOUSE, M. D., Chicago, Illinois

#### The Vitamines

**T**RUTH needs continual reiteration. It is human nature to forget. Some important fact is presented to our minds, we are impressed by it, and we resolve to bear it in mind for future use. Then other matters crowd upon the attention, the vividness of the first impression fades, and soon the truth that at first seemed so weighty and important becomes buried under a mass of mental lumber and is not acted upon.

One reason for this tendency to forget is, that so many theories professing to present the truth constantly are being offered for our acceptance. We have so many would be scientists, who are exceedingly prolific in their output of theories—theories based upon very slight evidence or no evidence at all. This is true in every department of human knowledge, however, especially so in matters relating to health; and the past decade has been unusually fruitful as regards new and sensational theories relating to health and disease, a few of which have proven to be true, a great many partly true, while the others, merely the product of unscientific speculation, were found to be utterly worthless and misleading.

The gullibility of the public, the eagerness with which people swallow the most extravagant and sensational statements relating to health, and the readiness of certain members of the profession to feed this gullibility and thereby advertise themselves, constitute one of the most disgusting spectacles of our day.

One of the most important scientific discoveries of recent years, but, which is not receiving the attention its importance demands, is that of the substances grouped under the name of vitamines, principles found in various foods, especially vegeta-

bles and fruits, and which are absolutely essential to health. If human beings or animals are, for any considerable time, fed exclusively foods low in vitamines, impaired health will result, and even death if the faulty diet is persisted in.

For a time, this subject excited considerable interest among physicians; however, there still are many in the profession that have only the vaguest ideas regarding it, while some have never heard of it. What is of more importance is, the fact that very little has been done in the way of instructing the general public or in bringing about reforms in the manner of preparing or manufacturing the foodstuffs upon which the bulk of the people live.

#### What Are Vitamines?

Under this loose but exceedingly comprehensive term is classed that combination of mineral salts, colloids and other organic compounds, especially those of calcium, potassium, iron and phosphorus, found abundantly in fresh vegetables, leafy grass and fruits; and in some animal substances, especially milk, egg yolk, blood and marrow.

When a diet robbed of these combinations called "vitamines" through high milling, sifting and bolting processes, or through the application of heat sufficiently intense to decompose the complex bodies, or through the action of chemical preservatives, thus rendering them inert, is persisted in, a condition of acidosis is gradually established which inhibits growth in the young, destroys resistance to disease and is ultimately followed by symptoms apparently closely related to those of scurvy, pellagra, peripheral neuritis, beri-beri.

The late war furnished a striking lesson on this subject, a lesson so spectacular that it is not likely soon to be forgotten; although, considering the clearness and convincing character of the evidence, it is

rather discouraging to find that so little has been done to profit by the lesson.

#### Story of the "Kronprinz Wilhelm"

On Sunday night, April 11, 1915 the German raider "Kronprinz Wilhelm" slipped quietly into our harbor of Newport News, with more than one-fifth of her crew down with a peculiar malady. With all her lights out, she had managed to slip through the line of Allied ships patrolling the ocean off the mouth of the James River. Helpless, she gave up the fight and allowed herself to be interned.

The day before the war broke out, in August, 1914, the "Kronprinz Wilhelm" had sailed from Hoboken on what appeared to be one of her usual transatlantic trips. But, the German government, knowing that war was coming, had seen to it that she had stowed away in her hold the guns, ammunition and supplies necessary to convert her into a commerce-destroyer within a few hours.

By the time that she was well at sea, her wireless informed her that the expected war had been declared, whereupon she was quickly transformed from a harmless palatial passenger-liner into a swift demon of destruction. For 255 days, the ship roamed the Atlantic, sinking numbers of merchant-ships of every kind and size, while, by virtue of her great speed, she frustrated all efforts to capture or sink her. She might have continued her career of destruction to the end of the war, had not a silent enemy from an unexpected quarter sown the seeds of death among her crew and sent her slinking away in the darkness to give up the struggle.

In all those eight and a half months, she did not enter any port, but, kept herself well supplied with coal and provisions taken from her victims before she sent them to the bottom. Most of these ships were crammed with foodstuffs of every kind for European countries. So abundant was the booty that her crew of 500 had an allowance of three pounds of fresh beef or mutton per man per day, besides an abundance of ham, bacon, butter, condensed milk, canned vegetables and fruits, boiled, mashed potatoes, white bread, sweet biscuits, lard, coffee, and sugar. She had taken from one ship such a quantity of sweet biscuits that, after she lay in the harbor of Newport News, tins of them were given as "tips" to

the messenger-boys that came out to her for telegrams, mail, and other errands.

#### As to Vitamine-Deprivation

The crew were well fed, if being well fed means that they had all they could eat of the kind of food eaten regularly by a majority of the people of this country. They had plenty of fresh air and exercise, and, yet, when they gave up and the raider crept into the James River under cover of darkness, 110 of the crew were completely prostrated and some of them on the verge of death, while nearly all of the remaining 390 were suffering in various degrees of physical disability. In the milder cases the victims complained of weakness, anemia, shortness of breath, palpitation, pain in the nerves in various parts of the body, tenderness of the nerves under pressure, and swelling of the limbs below the knees. The more severely affected had, in addition, dilated pupils, swollen gums, cardiac dilatation, atrophy of muscles, and paralysis. Slight scratches bled uncontrollably and refused to heal.

When the raider came to anchor at Newport News, she was visited by numbers of health-officials and other medical men and scientists. Opinions varied greatly as to the nature of the disease. Pellagra, beri-beri, scurvy, pernicious anemia, polyneuritis, and rheumatism were some of the diagnoses made. The newspapers spread the report that the disease was beri-beri, caused by eating polished rice, but, the ship's doctor stated that rice was not served oftener than 1 meal in 21. Nevertheless a majority of the scientific men decided that the malady was beri-beri and that polished rice was to blame.

It is not flattering to our profession that the problem was solved by a layman. The credit is due to Mr. Alfred W. McCann, food-expert, and, also, to the ship's surgeon, Dr. E. Perrenon, who had the wisdom to recognize the force of Mr. McCann's reasoning and to adopt his suggestions. The result left no doubt as to the correctness of Mr. McCann's views; and, when this episode is studied in conjunction with the diet of the crew during the 255 days at sea, it forms one of the most interesting chapters in the history of dietetic science.

Now let us briefly review the way the men were fed at sea, and the result of the

treatment adopted by Mr. McCann and Doctor Perrenon's repetition. We shall then be in a position to consider the scientific aspect of the matter.

#### Feeding the Men

Owing to the great abundance of food-stuffs taken from the ships that were sunk, the crew was not stinted in anything, both because food was plentiful and because the men would be more content if they had a luxurious table.

Breakfast consisted either of sausage, corned beef, smoked ham, bacon, fried meat or beef stew, the kind of meat being varied each day of the week; while, in addition to one of these meats, every breakfast had a plentiful supply of fried potatoes, oatmeal, mush, white bread, butter, cheese, condensed milk, sweetened coffee, and, once a week, boiled rice.

For dinner, there was either roast beef, pot-roast, fried steak or salt fish, changed daily. There also was pea-, beef- or potato-soup, boiled, mashed or fried potatoes, canned vegetables served in their own juice, white bread, butter, coffee, condensed milk and sugar.

At 4 o'clock every afternoon, the men were served with fancy biscuits or sweet cakes, coffee, condensed milk and sugar. (It reminds one of the life on a liner).

Supper consisted either of fried steak, roast beef, corned-beef hash, beef stew or cold roast beef, with an abundance of white bread, butter, cheese, coffee, condensed milk and sugar.

In fact, this crew was unconsciously acting as a poison-squad on a large scale. If the design had been to ascertain, by experiment, the real dietetic value of the kind of food mainly eaten by a vast majority of Americans, even in high-class hotels and hospitals, it could hardly have been better contrived.

The ship sailed from Hoboken on the 3rd of August, 1914. She made her first capture a month later, getting an abundant supply of fresh meat, white flour, butter, canned vegetables, coffee, sugar, and soda-crackers. Her next capture was the British steamer "La Correntina" from Argentina to London with over 5,000,000 pounds of fresh beef. So, the "Kronprinz"

crammed her own immense refrigerators with hindquarters and ribs enough to last her a year, and, in addition, corned 150,000 pounds of rounds in ordinary brine of salt and saltpeter. From that time on, each victimized ship contributed only luxuries. At least two of the ships taken had cargoes of wheat. A few bushels of this grain taken on board the cruiser and properly used might have saved the situation, but, the Germans did not know that, and the wheat was sent to the bottom.

By the middle of January, 1915, Doctor Perrenon, the ship's surgeon, observed that some of the crew were showing signs of unusual pallor, some dilatation of the pupils, and marked shortness of breath, but, he did not regard the matter as serious. He grew more and more puzzled, though, as he saw the occurrence of swollen limbs, pain and tenderness in the nerves, and increasing weakness. Broken bones refused to knit. Cases of palpitation, dilated hearts, and shortness of breath were daily increasing. Some patients had muscular atrophy and paralysis.

By the 27th of March, 50 of the men could not stand on their feet, while the rest were coming down at the rate of two or three a day. It was evident that the "Kronprinz Wilhelm" soon would be helpless, like the ship of the Ancient Mariner. Something had to be done. The captain had learned by wireless that her sister ship, the "Prinz Eitel Friedrich" had, by a bold dash in the darkness, succeeded in evading the Allied scout-ships and getting safely into Newport News. There seemed nothing left for him but to attempt to do likewise, so, he waited for a dark and stormy night, which came April 10-11. Luck favored him and, on the morning of the 11th, the vanquished raider was lying at anchor in the James River—vanquished, not, by the enemy's guns, but, by the booty taken from that enemy, and by ignorance of the laws of dietetics. She was a floating hospital, almost a floating coffin, with 110 dying men on board.

The treatment given to the men, its results, and the scientific aspect of the case will be discussed in a future article.

[To be continued.]

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# Hereditary Syphilis and Miopragia

By DOCTOR HUTINEL, Paris, France

Professor at the Medical Faculty of the University of Paris

[Concluded from October issue, page 692.]

## Unto the Third and Fourth Generation

**B**UT, here is a fact of major importance upon which I now am obliged to insist. It is not alone in subjects directly infected by their parents that the changes in the endocrine glands appear and exert their dystrophant action. However slightly they may find expression, they are transmitted by the paths of heredity and will appear more or less modified in the descendants.

Nothing is more common than the hereditary transmission of these dystrophies. Here is an ordinary example: if a woman afflicted with thyroidal insufficiency or with Basedow's disease bears children, these frequently are myxedematous or, at least, hypothyroidic, and this hereditary transmission of an organic insufficiency is not confined to the disorders of the endocrine glands. Does it not occur again in various degrees when we come to diseases of the liver, the skin, the nerve-centers? Does it not give rise, in many subjects, to indisputable miopragias?

## Syphilis Both Transmissible and Hereditary

Then, aside from the definite manifestations, through the *direct* action of the treponema, upon the organs of heredo-syphilitics or, *mediately*, through the occurrence of lesions affecting the apparatus regulating nutrition, we must, among others, admit the fact of hereditary dystrophies. These are a result of the infection and, being more persistent than the latter, they sometimes are met with as late as in the third generation of the descendants of the infected progenitors. Such a degenerated descendant of a syphilitic grandfather has not, perhaps, been himself infected. He has inherited a dystrophy, but not the original infection.

Is not, then, here a most satisfactory explanation of clinical facts that are known to every physician? Is not here the bond that brings together, in a way, natural morbid conditions as unlike as dwarfism and gigantism or emaciation and obesity?

If such a dystrophic, in whom the Wassermann reaction is persistently negative

despite all attempts at reactivation, is the descendant of a syphilitic grandfather, one can, from this, judge as to the action that a malady such as syphilis can exert upon the vitality of a race.

One can not fail to recognize the relationship subsisting between the vascular blood-glands and the sexual organs. Not only do certain glands, such as the thyroid and the pituitary gland, sometimes manifest their distemper at the time of puberty or of the menopause, but it not infrequently happens that the development of the ovaries or of the testicles and also the function of the sexual organs is retarded or arrested by thyroidal or hypophysial insufficiency.

Therefore, hereditary syphilis, in the last analysis, is one of the principal factors of this lamentable state of degeneracy in which the subjects are nothing but abnormal creatures, imperfect and sterile. It may directly affect injuriously the testicles or the ovaries. It especially may interfere with their development by modifying the organs regulating nutrition.

## Diseases of the Bones, and Blood-Glands

Between the endocrine glands and the bone-marrow, there, likewise, obtains a relationship; and it will be of interest to inquire into the connection that may be traced between hereditary syphilis and rickets.

In hereditary syphilis, no lesions are more common than those of the bones. Parrot, who has studied these bone-disorders all his life, declared that this connection always existed. Indeed, he, in the end, came to assert that rachitis is, in every instance, a syphilitic manifestation. That, it is true, is an exaggeration. Syphilis, in itself, is capable of giving rise to rachitis at an early age, and, moreover, in a grave form. This is a fact that, it seems to me, can not be doubted.

But, is syphilis the sole or even the principal cause of rickets? I do not believe so.

The fundamental cause of this osseous dystrophy seems to be a toxi-infection of



intestinal origin, most frequently provoked by bad alimentation, notably by artificial feeding, especially badly regulated bottle-feeding. Infectious processes, acute or chronic, alimentary deficiency, and lesions of the endocrine glands likewise stand in relationship, but, mainly in the role of contributory causes.

What, then, is the part played by syphilis in the pathogenesis of rachitis? It is far from being negligible. In its changing the bones from the very first weeks of life, it renders them more vulnerable. Is it to be wondered at, then, in these circumstances, to see rachitic deformities make their appearance even in infants nourished at the breast and to encounter this dystrophy in grave forms, whether it be that the bones become very painful or that they break with great facility or, again, that they present considerable deformities?

It is the thickening of the bones of the skull that, without being truly pathognomonic, always causes one to think of hereditary syphilis. In nurslings, an early, grave or painful rachitism suggests the idea of a specific infection, especially if it is not attributable to improper alimentation. This, however, can not be positively affirmed.

But, the child grows. After three years, it will be difficult, in many instances, to accuse the feeding of being at fault; and, yet, there are subjects in whom bone-deformities, instead of diminishing in degree, persist or even grow worse, in whom the long bones break most readily, bend or become curved in odd ways, thus rendering the patients completely helpless; while the flat bones, especially those of the skull, are changed to thick symmetrical plates.

It, then, is incumbent to suspect some other cause besides that of digestive toxico-sis. Frequently that cause is syphilis. But, how does this act? For one thing, it has sensitized the bones. That is certain. One, therefore, can understand how, in places, the infection with the treponema may produce manifestations that are truly specific; as, for instance, in the periosteum or in the epiphyses, such as the periostoses or, also, gummas. But, why should, in a large number of cases, the entire skeleton become involved?

It must be admitted that it is not, here, a case of infection found in some part or other, but, one of an absolute dystrophy, of a reaction on the part of the entire

bone-marrow. As to the origin of this dystrophy, the action of the endocrine glands often must be suspected. However, may not it be that, generally, hereditary syphilis has simultaneously modified the bones and the glands, and, is not this that which, in the last resort, we must seek and search for? This fact is not always discovered; far from it! Still, often it is established by means of the Wassermann reaction and by the success of the treatment at the same time.

At the period of adolescence, when the sexual apparatus develops, when the child grows and develops and begins to mature, another bone-dystrophy makes its appearance. This has been termed late rachitis. It is characterized only by special deformities, such as scolioses, lordoses, kyphoses, genu valgum, et cetera, and which recall only distantly the same deformities in nurslings. It makes one think, in the majority of cases, of a modification of the endocrine glands stimulated by the incipient functioning of the sexual activity. Under these conditions, the hypophysis, the thyroid gland, even the adrenals, become more or less active. Ordinarily one need see in these deformities only the result of a slight dystrophy affecting subjects that are exhausted, overworked, deprived of pure air and muscular exercise. The syphilis scarcely is apparent. But, if the bone-deformities assume a particularly grave character and are accompanied by serious disturbances of nutrition, it is advisable not to overlook this. It certainly is not the only factor of the severe forms of late rachitis, nevertheless, it is one of the most frequent ones.

At all periods of childhood, when rickets, and more generally when bone-dystrophies show themselves in abnormal or severe form, it is well to look for syphilis.

I might say the same with regard to anemia that makes its appearance at different ages of the child, when it assumes grave forms, and, if one does not find a satisfactory explanation for its occurrence, one must always make a Wassermann test.

\* \* \* \*

I, possibly, may be accused of laying too much stress upon syphilis, a field that already is so vast. I am willing to accept the charge. If one finds himself in the presence of a malady or a nutritional disturbance the cause of which is unknown,

if one feels disarmed and powerless, then it is a fortunate thing to discover that the infection that has caused all the trouble

is that of syphilis. For, in this way, the means for successful treatment are afforded as soon as the diagnosis is made.

## The Making of an Army Medical Officer

A Trip to an American Red Cross Convalescent Home

By CAPTAIN ROBERT C. MURPHY, M. R. C.,  
Conv. Home No. 7 Rochefort-en-Terre, France

**E**ARLY in February, I was ordered to take charge of a small convalescent-home, situated 35 miles north of St. Nazaire. So, I packed my locker, rolled my bedding-roll, had them loaded onto an am-

ing them limited. In ascending a hill, there are here as many curves in the road as there are turns in a corkscrew; which makes it easier for a horse, both on the upgrade and downgrade, while it is really beautiful from the artistic standpoint; although they are a terror to the driver of an automobile.

In this section, oxen are being largely used, now, yoked to two-wheeled carts. The natives almost invariably take the left-hand side of the road, the driver walking behind his cart, and, at the toot of an automobile-horn, they scurry to the heads of their team and guide them across the road to their right side. In this way, they take up the whole of the road and, if a chauffeur hasn't his car well in hand when he is confronted with one of these carts after rounding a curve in the road, there is likely to be a mixup.

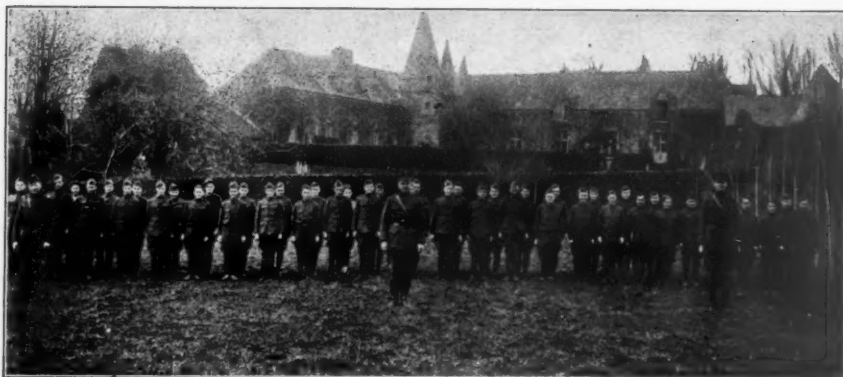
At every crossroads, there was a stone cross, sometimes about three feet high and, at many of them, about six or eight feet high. At some of the main crossroads, there are wooden crosses about twenty feet high, with an image of Christ spiked to it. Between crossroads, there are many shrines built of stone, bearing images of the different saints. In front of these images, or statues, are plants or floral offerings, placed there by the devout peasants as an offering, I presume, either to appease the wrath or to gain the good will of the saint. We passed one shrine—which I afterward visited many times—which was built over a small spring, the water bubbling up in front of a statue of a female saint, and bearing the legend that anyone that had sore eyes had but to bathe them at that spring in order to have them cured.

We passed through several clusters of stone houses, called villages out of courtesy; crossed the Vilaine River on the suspension-bridge high over the masts of the



Captain Murphy.

balance, and started for the new assignment. At that time of the year, the fields still were rather bare and the trees leafless. The ride was over good roads, on which good time could be made but for the everlasting series of curves. The country is hilly and the roads were laid out, evidently, when vehicles were few or means of draw-



A formation of some of the patients. Captain Murphy on right in front. In background, boxwood hedge, feudal well, and château.

small sailing-vessels which come up the river from the sea. Crossing the bridge, we took the road to the right, passing through Marzan, Peule, Limerzel, to Rochefort-en-Terre. The "en Terre" (on land) is added to distinguish it from the other city of Rochefort, located on the bay of Biscay, "sur-mer", or, on the sea.

#### Life at Roche-en-Terre Sanatorium

We reached Roche-en-Terre after climbing a long grade, turned sharply to the left and entered the gates, over which hung the sign, "American Red Cross Convalescent Home No. 7"; we passed along the inclined driveway, through the entrance into the ruins of the walls of the château, to the château itself. Alighting, I entered what was to be my home for the next ten weeks.

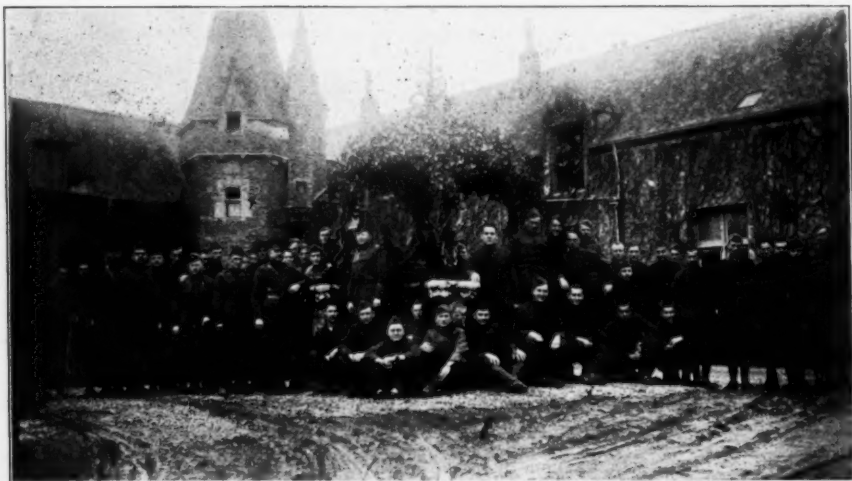
The "Home" was in the château (castle). It was owned by an American artist, who had purchased it sixteen years ago, had it reconstructed, and, with his family, spent four months of the year here, while living the rest of the year in Baltimore. While the world-war was going on, this American, feeling that he would like to do his share to help, offered his home to the American Government, to be used as a home for the convalescent soldiers of the A. E. F. The government turned it over to the American Red Cross, which organization appointed the owner a Captain (to serve without pay) and sent him across to help manage it. The professional staff, to consist of one Medical Officer, two nurses, and one enlisted man of the Medical Department, U. S. Army, were detailed from Base Hospital 101, St. Nazaire. The

patients were drawn from the military hospitals at Vannes, Mucon, Camp Couetquidan, and St. Nazaire.

At the time of my arrival, 80 patients were domiciled there. As the men became fit for duty, they were returned to their respective hospitals and others were sent in their place, so that we had from 65 to 80 inmates there all the time. They were all convalescents, that is, soldiers that had recovered from a sickness or disabling wounds, but, were not sick enough for the hospital, yet, not well enough to return to active duty. For these men, a few weeks or a month at a convalescent home, in addition to fresh air, pleasant surroundings, and an abundance of good food, with little work to do, worked wonders in their general health.

#### How Life Was Made Pleasant

Our routine for the day was, to arise at 6:30 a. m., fall in for roll-call at 7 a. m. and ten-minutes of setting-up exercise, and breakfast at 7:30; at 9 a. m. to fall in for two hours of fatigue-duty, policing up the grounds and doing any light work needed to keep the home in order; recall from fatigue at 11 a. m., lunch at noon, then off duty, to take walks through the country for the afternoon, with dinner at 6 p. m. None were allowed to leave the grounds after dinner except by permission. As the days grew longer, this time was extended to 8 p. m., so that the patients could go out and take a walk after their dinner. The evenings were occupied with playing games of cards, checkers, chess or attending entertainments. One room was arranged for



Another group of patients around the feudal well, Captain Murphy in the center. The owner, Captain Klots, is the officer to his right.

a recreation-room. A small stage was built up where we had players from the Entertainment Department at St. Nazaire, when they could send them, and, at other times, the patients were drilled by the Red Cross secretary to do their own acting. These plays by the patients, themselves, were of more genuine enjoyment to the other patients than those by the professional players were to them. The mistakes that they made and the puns that they got off at the expense of some of the other patients and the personnel of the Home were timely and always raised a laugh.

The owner of the château was a genial host and did all that he could to make things interesting for the men. He took part in the plays and the games. He gave prizes of pipes and pocket-knives to the winners. He arranged the costumes for the amateur performers, painted their faces and dressed them in their makeups. One evening he had some of the village-women come up to the Home and cook pancakes, in true Britton style, over the fire in the huge open fireplace of one of the dining-rooms.

We had two dining-rooms; one for the noncommissioned-officer patients and the other for the privates. The men sat down at real tables and were served their food as nearly like home as possible. We had a French cook, who was a wizard at turning out good dishes when she felt like it. To help her with the work, three or four

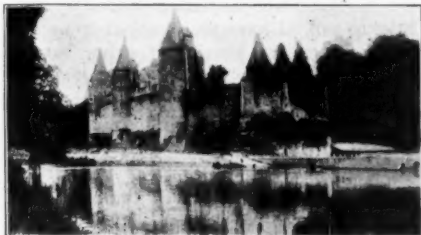
of the men were detailed each day as Kitchen-Police. They peeled the potatoes and did the heavy work. The food was good and abundant. Being in the country, we had fresh vegetables and eggs even when they were scarce in the cities. For an innovation on holidays, such as Lincoln's or Washington's birthday and St. Valentine's Day, our host arranged the supper at one of the little hotels in the village. The men would fall in at the Home, march down to the hotel, and then sit down to a regular banquet. After eating, there was story-telling and singing. Then all filed out to the street, fell in, and marched back to the château. As we were the only American troops in the village, these affairs were of great interest to the natives.

#### Wonderful Visits to Ancient Castles

To make things still further interesting for the patients, trips were made to the different châteaux in the district. We had four automobiles and details of men were taken out in turn. One trip was to Josselin, a city some 24 miles distant. Here, on the banks of the Oust River, was located one of the most beautiful castles of Brittany. Its present owner is a boy fourteen years of age. The boy's father was killed at Verdun at the head of a company of "Blue Devils," of which he was a captain. This is one of the four castles that were fortified in the olden days, and is the only

one of these four fortified castles that escaped destruction by conquerors, even escaping the devastating hand of Richelieu.

The castle at Josselin is a magnificent structure. It is built of stone, on a natural-rock foundation right on the bank of the river, and commands a fine view of the surrounding country. The moat that pro-



Château of the Duke of Rohan in Josselin.

tected it on the land side is now filled in and sodded, and makes a pretty garden. We rambled around the battlements, down into the dungeon, which constitutes an integral part of each castle, and then through the persuasive use of a few francs, we had the



The table set for a buffet lunch for a dance given to officers and nurses of Base Hospital No. 101.

caretaker show us through the castle itself. And, it proved a veritable museum.

On the second floor, grouped around on the walls, there were suits of mail and weapons of from the 13th to the 16th centuries. Hidden behind curtains, were some of the court-robos of Louis XIV. On stands, were hung the saddles and bridles used by the ancestors of the present owner. In cases along the walls, were sabres of many kind, the spyglass that Napoleon

used at the battle of Austerlitz and the bejeweled lorgnette of Marie Antoinette, cameos of wonderful workmanship, coins from nearly all the countries of the world, including a nickel and a dime from the U. S., many relics of China and curios from the Arctic that had been collected by the Duke of Rohan besides many letters of commendation that the Duke's ancestors had received from the kings of France. In another glass case, there was a piece of white silk with a rusty bloodstain on it. This is a portion of the silk dress of one of the court-ladies that was with the Duke de Barre when he was assassinated. On the walls are hanging rich tapestries and old paintings.

Downstairs, we were shown the ancient huge fireplaces, large enough to roast a whole ox. In the saloon, were many price-



The corner of one room. Several of the beds were supported by a gift from the Eastern Star of Missouri.

less paintings of kings and queens of France and several of the ancestors of the Rohan family. On an easel, was a painting of the Duke of Rohan, who was killed at Verdun. It showed him with his head bound in a bandage, on his breast were the Croix de Guerre, the insigne of the Legion of Honor, and a decoration received for bravery in the Chinese campaign.

Another one of the instructive trips took us to the ruins of the castle at Suscinio, close to the gulf of Morbihan. A beautiful ruin of what once was a beautiful castle.

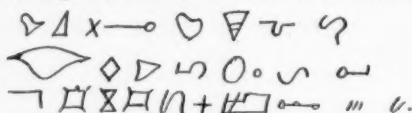
#### Still Other Castles Inspected

Still another trip took us through Questembert, on the road toward Vannes, to the city of Elven. Just outside of the city, stand the ruins of what once was an imposing, and supposedly impregnable, fortified castle. Impregnable it was till Richelieu laid his destroying hand upon it. The old



moat around it is partly filled in with the debris of the crumbled walls; however, in places, it still is intact. The old drawbridge is overgrown with grass and weeds, and, crossing it, we stepped inside the tower that still remains. The inner walls are octagonal on the first floor, hexagonal on the second floor, fivesided on the third, and foursided for the other several floors. All that is left are the walls, the royal staircase of 200 steps that lead clear to the upper battlement, also the servant's staircase, and a number of the upper rooms. On the third floor, there is the room in which the Duke of Richmond, who afterward became Henry VII of England, was kept a prisoner for two years. The bed on which he slept still stands there, and, on a marble tablet screwed to the wall, is an inscription to the effect that in this room he lived for two years.

In the olden times, operative masons, after completing their apprenticeship and becoming master-masons, were given the right to inscribe on each rock that they laid in the construction of a building, a certain distinctive mark. No one else dared to use the mark of a mason other than he to whom it was given. In those days, infringements were severely dealt with by natural law, much as we do nowadays in civil courts with a man that infringes on a trademark. When this castle at Elven was being built, I presume that it was considered an honor to help in the building; for, inscribed on the keystones of the doorways and the windows as well as on many of the rocks in the walls, there are found many different marks, showing that many masons helped in the construction. Here are a few that I copied from the stones forming the walls of the first two stories:



On two other occasions, our host took about thirty of the patients out on camping trips. Provisioned with bread, jam, ham, and eggs, they drove along the road for about ten kilometers to a quiet place in the woods. Here, fires were kindled and a right royal feast was prepared. Another time, we drove to Muzillac to the fishing-box of a baron, where we fished, rowed for a few hours, then sat down to a picnic-

lunch, that had been brought along, consisting of cold meats, sardines, fried potatoes, oranges, candy, cigars, and hot coffee.

#### Those Interesting Market-days in Brittany

In most of the villages in this section of France (Brittany), one day a week is set aside as Market-Day. On this day, all the villagers for miles around bring to the market-place anything that they may have to sell. I have seen backed up against the walls of the houses on either side of the street as many as a hundred teams or yokes of oxen. The streets are narrow and sometimes the two opposing rows of oxen took up the whole street—and then, what a commotion we would start when trying to pass through with our automobile. All along the road to the market, we would see peasant women leading pigs with just a small rope around their necks, others carrying baskets of eggs, leading horses or trundling wheelbarrows filled with vegetables. It is a gala occasion, and men and women alike were dressed in their finest. The men with broadbrimmed velvet hats from which fluttered two streamers, tight tunics, bellowed trousers, and hobnailed shoes, the women with snowwhite demure little coiffures on their heads, velvet bodices embellished with a few frills of white lace down the front, black skirts, and wooden or hobnailed shoes. These hobnailed shoes are the bane of an autoists life while riding through France, for, it is not unusual to find half a dozen nails in one's tires.

Guérande, a walled city not far from St. Nazaire, we visited quite often. The castle here still is intact, with its moat along the front of it. The paved streets of the village are very narrow.

We made many trips to Vannes, near the Gulf of Morbihan. There was a large American Base Hospital there, which supplied us with convalescent patients. Vannes is a walled city, though very much larger than Guérande. Its old walls and gates remain intact. The ancient moat is filled in and sodded over or planted with flowers. The city is beautiful and picturesque, with plenty of shops and stores and good restaurants. The Y. M. C. A. had an officers' club here, where a very good meal could be bought for 6 francs. The service was good, there was clean linen on the tables and a homelike atmosphere was maintained.

I like Vannes better than almost any of the other cities that I visited in France.

There was about it a modern air, the stores were up to date, and the shopkeepers were business-like enough to try to sell goods and always willing to show what they had to offer. As a rule, French storekeepers do not try to sell to a customer anything but what he asks for.

These were but some of the trips on which we took or sent our patients.

The four fortified castles of feudal times, or what remains, of this region, are, as said before, located at Elven, Susicinio, Josselin and Rochefort-en-Terre. Josselin still is in good condition. Elven and Susicinio are in ruins.

#### **Present Condition of Chateau Rochefort-en-Terre**

Rochefort-en-Terre was twice destroyed, once by Richelieu and again at the time of the French Revolution. When the present owner, the American artist, acquired it sixteen years ago, he had part of it rebuilt, employing for the purpose the old building-stones and to a certain extent following the original plans of the old castle. The main staircase now is made out of hewn logs which formerly had been used in the stable. Around the open fireplaces, there are fantastic carvings of wood. The doors of the cupboards also are carved with many strange designs. Hanging on the tapestried walls, are many restored oil paintings, which were purchased at different times, in the last twenty years, by the owner, who himself is an artist, and were by him carefully cleaned and touched up, so that they look nearly as well as if newly executed. There are many originals hanging on the walls of some of the rooms, which have been painted by our host.

Nearly all of the second floor was given over for sleeping-rooms for the patients. From 6 to 10 beds were placed in the different rooms, depending upon the size; ample space being allowed between the beds. Large French windows vouchsafed a wonderful view of the valley and surrounding hills. My own room also was on this floor. The door bore a sign, "Private." The room was provided with running hot and cold water, a radiator, hot-water heat, rugs, a closet, two chairs, and a real brass bed. These things, that seem so commonplace at home, are real luxuries in this country.

A small room was set apart for an infirmary, for, while all of our patients were

convalescents and presumably did not require any treatment, every now and then, some of them would show an increased temperature or have a sore throat or some indigestion or other troubles, so that we had to expect a little use for the infirmary. There were three modern bathtubs on this floor, consequently there was no excuse for one's being dirty. For the evenings, we had lamps or candles.

Indeed, the castle was a strange mixture of old and new in many different ways. It was rebuilt of old stones and parts, old glass for the windows, these barred by old gratings, there were old-fashioned fireplaces, rare old paintings on the walls, old furniture and dishes, and in some of the rooms there were thirteenth- to fifteenth-century, wormeaten wooden chests. The parts of the original walls that remained standing were covered with ivy that seemed to be four- or five-hundred years old, yet, inside, we had modern plumbing and heating, modern beds, ate off modern tables food cooked on a modern army-range.

At the back of the chateau, where there was a southern exposure, there are two green-houses, with plants and flowers all winter long. Early in the spring, our well-meaning but shortsighted gardener, thinking to destroy the plant-lice that were on some of the plants, burnt some sulphur in one of these green-houses, with the result that all of the parasites were destroyed and, incidentally, many of the plants that the owner had carefully nursed all winter.

From the garden in the rear, we had cauliflower and salad-greens all through the winter. Later in the spring, this garden was beautiful with blossoms on pear- and cherry-trees. A small hennery away back at the end of the property furnished us with fresh eggs when they were very scarce in the cities. A few pigs in a clean pen ate all left-overs from the table.

Near the end of the garden, on the highest point on the property, was a stone tower, in which was the tank of water that supplied pressure for our pipe-line. In the front of the building, was a patch of garden, some boxwood hedges, and a double hawthorne-tree, and, what was of a great deal of interest, an old feudal well, rich in legend. It is built of stone, six-sided, with wrought-iron over the top, in the shape of the ducal crown, and is covered with ivy. It is 13 meters down to the water, and, at

the time, there was about 13 meters of water, and, presumably, it is about the same distance to the actual bottom; for, in the olden times, after the rest of the castle had been destroyed, children used to amuse themselves by throwing stones and dirt down into it, to hear the splash. The stories have it that long ago, if the castle would be besieged, the family-jewels and valuables would be lowered into the well for safekeeping, to be taken out again when the danger was past.

Beyond the feudal well, was what had been the bakery. This little structure still is in good condition. At the end of a lane of 10-year-old trees, stands a little chapel, built, about ten years ago, of stones from the ruins of the castle. This is a "cute" little building, with a seating-capacity of about twenty people, in which Catholic services were being held every Sunday. It really is a miniature church, with statues, a bell for calling the people to prayer, a little altar, candles, and other appurtenances.

Back of the chapel, is a grove of apple-trees, their trunks covered with lichens, while, in the branches, are nestling clusters of mistletoe.

In the place of the filled-in moat of ancient times, there now is a neat garden and, in part, a village-street. On what is left of one of the battlements overlooking the village there have been fitted up a little conservatory and studio. Here the owner lived the while we occupied the castle.

There are two dungeons on the grounds, one underneath the studio and one in front of the chapel. These had, at one time, been connected by passages, but, at present, one can travel only about twenty feet in each direction, then being stopped by a cave-in. Clusters of bats clinging to the dripping walls and a roof and a pile of bleached bones in one corner of the larger dungeon make a grewsome sight in the flickering light of the candles carried on these tours of inspection. Tradition has it that these two dungeons are connected and the tunnel leads to one of the houses and the largest church in the village, so that, in times of stress, they could be used as a prison, or to conceal there a body of armed men, ready for a dash, or, as a last resort, as a means to escape.

#### Rich with Historical Lore

Just outside the old walls, is a flight of stone steps leading down to the village-

street. History has it that several bloody encounters were fought on these stairs during the French Revolution. Crossing the village-street from the foot of the stairs and then down another flight of stone steps and along an alley-way, takes you to the village-church; outside of which are two very old tombs and a granite monument, the base of which, surmounted by a crucifix, represents the stations of the cross. The church, itself, is nearly six hundred years old. Inside, the church is almost barbaric in its splendor. The ceiling is painted to represent the heavens on a starlit night; hanging on the walls, are several crucifixes; around the three altars are statues of saints and the Virgin, surrounded with groups of candles; in front of one of the altars, is a baptismal font; the floor is of stone flagging; the benches are straightbacked and severely plain; the stone walls are bare and, in places beneath the holy-water fountains, it is green with lichens and a very light growth of moss. I was told that there never had been a fire built in this church since it was built.

#### Simple Life of the Villagers

The village of Rochefort-en-Terre has about 700 population. The people were very friendly to Americans. The streets are very narrow and the houses are built very close together. All the houses are of stone, very few of them more than two stories high. One house there was built in the twelfth century. Several of them have the projecting second story that was in vogue in earlier times. The most-modern house in the village is about sixty years old. Open fireplaces are the rule. I saw no stoves except those in the hotels. Outside of the windows, are flower-boxes made of hewn stone and filled with plants that, in the summertime, make the village a riot of color. Below the window-sills, are grotesque gargoyles chiseled out of stone. Old-fashioned knockers adorn the doors, while the roofs are covered in spots with the mosses and lichens of centuries.

This village has been the Mecca of artists for many years, because of its picturesqueness, its houses, the peasants, the beautiful colorings of the sky, the hills of rocks over which the cattle graze and climb. In the principal hotel, the Lecadre, there are nearly one hundred paintings on the walls, contributed, each one, by a different artist that had spent one or more seasons

here. In this hotel, there is to be seen the most wonderful fireplace, in front of which I have eaten many a meal. To sit here for a supper, in front of the open fire of logs, while outside the rain is pouring down cold and wet, to light your pipe or cigar with a brand from the fire and look up the wide chimney at the hams and sausages hanging there to smoke, is a unique experience.

The nearest railroad-station is at Malansac, about 7 kilometers distant, and I suppose, this fact has much to do with the simplicity and honesty of the villagers. They do not travel very far from home; and, being off the beaten path of travelers, tends to keep them pretty much like their fathers.

The Home was closed up in the middle of April, when glorious spring was over

the land. Trees were in leaf, flowers in bloom, farmers tilling their soil. The fields that were bare as we came up to the Home now were well covered with oats, rye, and garden-vegetables. The curves in the roads now are even more dangerous because of the fact that the trees hide the outlook. However, this is offset, to a great extent, by the fact that the spans of oxen are now at work in the fields and there is plenty of grazing in the fields for the cattle and horses that, in the early spring, grazed along the road. In the stone windmills along the roads, everyone seemed to be as busy as could be. I arrived at Base Hospital 101, in St. Nazaire, after my ten-weeks' absence and resumed my allotted work.

## A Common-Sense Essay on Diet

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*[Continued from October issue, page 714]*

**I**N order to learn just what elements and what foods are called for in any specific case, the food-value tables should be consulted—and this should be an easy matter for every average housewife. They are published everywhere—in newspapers, in the magazines devoted to the home, in books and pamphlets, and are to be had in every public library. Failing this consultation, the next-best route to health in relation to food is by way of supplying variety. Always variety! It need not, necessarily, cost any more than the deadly monotony, either in time, labor or money. In fact, it should cost less in all these directions. A little practice of the principles, on the part of the housewife, a list of foods kept tabulated for easy reference, so that the brain need not be racked for selections every day, and a sincere desire for promoting the health and comfort of herself and family, a desire sufficiently strong to induce a little extra effort at first, these are enough to start the ball of strength and content rolling, a ball that will roll more and more smoothly as it gathers momentum with time and practice.

### Meat and Morbidity

The present high price of meat, a price likely to be sustained, has brought, more

than ever, to the front the question, "Is flesh really a necessary article of diet?"

It is to be regretted that the transmitted belief, that meat is essential for the attainment of mental and physical vigor, still is so widespread, even among the reflectively progressive and well-informed. A cult of thousands of generations does not die easily—nevertheless, this one should pass away. Humanity never acquired wisdom with such leaps and bounds as at the present time, nor so promptly modified its course in accordance with the demand of new things learned. In these days, prejudices have a lessened force and habits are subject to change or complete abandonment, as a result of reason and common sense.

We realize the fact that we are not, necessarily, the constrained heirs to the creeds and appetites of our ancestors. From experience or from inference, we know that there is nothing in our blood compelling us to maintain the habits of our forefathers; it is true that, to some extent, we still are under bondage. The dignity of age has its effect upon us, and meat eating enjoys this dignity ever since it has been practiced by man—supposedly from necessity—from the time when he began existence as a human being. Nevertheless, this conviction is a fallacious one.

The eating of flesh is a habit that can be modified or completely abandoned, and often to advantage.

There can be no denial of the fact that we are the descendants of uncounted generations of flesh-eaters. We retain the dog-teeth of flesh-seizing, and flesh-tearing animals, and to some extent, retain their cravings and inclinations, but, what of it? We also retain, in the lower vertebræ, the vestigial tail of the ape, yet, do not accept that fact as an indication that our habits should be monkey-like. We do need the proteids, which even our immediate ancestors obtained from the flesh they consumed; still, we have become so advanced in the knowledge of facts in nature as to know that we can secure the needful proteids from simpler and less wasteful foods, some from vegetables, others of animal production. In making such departure, we but follow the dictates of an ordinary reasoning-process, and are assisted, it may be, by a certain impulse of disgust for flesh.

I have told you what the daily dietary of the average man taking moderate exercise should consist of, but, I now wish to call your attention to the mineral elements essential for a balanced and adequate nutrition, elements that have justly and aptly been described, as "the building-stones of the body"; also, that the most-advanced scientists tell us that where the caloric value of the total food is high, we require less protein, and that it is made evident that the consumption of too much meat may become directly harmful, resulting in weakness and muscular fatigue, instead of in strength, in melancholy or an irritable temper, instead of in cheerfulness and equanimity. This is because of the excess, in the system, of waste nitrogenous products, their decomposition acting as a poison that affects both nerves and muscles.

Sir Lauder Brunton, the noted London physician, thus graphically described the injurious effects of the kind of diet referred to:

"How is it that the even-tempered man has become irritable, the clear-headed man muddled, the active one lazy, the sober one perhaps a tippler, and the cheerful and buoyant depressed and melancholy? What has happened to him? Not only does the brain seem exhausted, but, the whole system seems to be languid and

weak; instead of the man being able for a twenty- or thirty-mile's walk, one of a mile or two will produce fatigue, and sometimes an intense languor is felt, without any exertion at all. And, yet, all this time he may have been trying to keep up his strength. He takes butcher's meat three times a day, perhaps also strong soup, to say nothing of wine or brandy and soda, to pick him up. His tissues ought to be getting sufficient nourishment to enable them to do their work, and, yet, it is evident that they are not in a condition to do so. The man wonders at his condition, and, when he goes to his medical attendant to describe his case, he says, 'I take all sorts of strengthening things and, yet, I feel so weak.' If, instead of using those words, he were to say, 'Because I take all sorts of strengthening things, I feel so weak,' he would express a part, at least, of the truth."

#### As to a Vegetarian Diet

As indicated in the foregoing quotation, many people, perhaps the majority, still believe that the eating of meat is necessary for the maintenance of strength and energy in the individual. This is a fallacy that calls for a more general exposure. Illustrations afforded by the facts of history and of the present time are not sufficiently considered. It is forgotten that some of the most powerful nations of antiquity rarely were flesh-eaters, and, by their deeds, made it obvious that meat does not afford the elements most needed for the development and replenishment of strength, either physical or mental. Consider some of the examples of today:

The remarkably fine physical development and the astonishing vigor of the natives of the Canary Islands have long been a subject of admiring comment by travelers; yet, the diet of these people is almost exclusively of *gofio*, a flour made from cereals parched or roasted before grinding. Few races surpass the Arabs in ability, power of endurance, and longevity; yet, they subsist largely upon dates and milk, the Bedouins, especially living upon nothing else for periods of months at a time.

As all know, the peasants of France are almost as famous for their hardihood as for their thrift, and there are many centenarians among them. Cobden praised their vegetable soup as the source of



French prosperity. In a work published by Bertillon, it is stated that the vine-workers of the department of the Nievre, of Burgundy, eat meat but once a year; the agricultural laborers of the Maine department eat it twice a year, the weavers of Sarthe on fête days only, while the Bretons never eat it!

The Greek boatman's food consists of a small portion of black bread and a bunch of grapes, raisins or some figs. They nevertheless, are astonishingly strong and enduring and among the most active, graceful and cheerful people in the world. The peasants of Italy, as a whole, are a fine and physically capable race, yet, the majority of them live almost entirely on cakes and porridge of chestnut flour, a little wheat bread and the native wine. Most of the Japanese are vegetarians. The general food of the Norwegians is rye bread, milk, and cheese. The chief articles of diet of the Polish peasantry are bread and potatoes. We all are acquainted with men and women in America of simple habits or even strict vegetarians who are strong, healthy, and cheerful. My experience as a physician convinces me that more people suffer from the "blues", physical weakness, and poor health generally because of too much meat-eating rather than from too little.

#### Meat Eating in the Light of Science

Let us now consider the problem more technically and scientifically: Meat is not really necessary to sustain either mental or physical vigor or animal-heat. Moreover, the consumption of much meat must be considered as unfavorable to longevity. Meat contains venous blood, which is filled with such poisons as urea, uric acid and cholesterin, with others that would have been removed by the liver and kidney of the animal had it lived. It is a simple fact that, when we eat the flesh of any animal, we take into our system its so-called "waste products", substances that would have been eliminated had the creature not been slain for human food, and which become poisonous in the human body unless they are cast off by the new machinery into which they have been introduced. We, thus, are compelled to get rid of poisons besides those normally our own. It is impossible to avoid the taking into our blood of a proportion of these dangerous substances when we eat meat, and we must

take the consequences, whatever they may prove to be. Almost inevitably, there will be some clogging of the circulation.

And it is not alone an interference with the circulation that may be threatened. There may come a possible injury to the principal organs of the body. The heart, the liver or the kidneys may be overtaxed because of the effort necessary to cast off this needless refuse, and a similar demand may be made upon the lungs, which must consume more air, in order to purify the dangerously freighted blood that is making such unusual demands elsewhere. There result indigestion and fermentation, and the whole body is affected for the worse.

#### Obesity, and Its Cure

Reference has already been made to the feeling of apathy and inefficiency that comes to him who eats too much meat, and especially is this manifested in the disinclination to exercise, which, if taken, might aid in ridding the waste products that are producing such results. Frequently the body increases in weight under such sinister conditions and this but adds to the evil of the situation. Lack of energy induces fatness, and fatness induces lack of energy.

And, what is the remedy for such condition, with too much meat-eating as chief among its causes? In a general way, but, absolutely, the answer is: exercise, as much fresh air as possible, and a prompt reform in the diet." All these are necessary. Sleep with open windows, be out-of-doors as much as practicable, and live, for a time at least, upon the simplest food. These combined measures are practically within the reach of every one that can walk. Breathe deeply; in and out of your living-place, at home or upon the street. Dress according to the season. When walking, do not merely stroll along, but, walk rapidly much of the time, so as to induce a more rapid circulation of the blood and to get the machinery of every part of the body into such action that the waste matter may be cast off or consumed. Walking alone will accomplish much, but, usually requires an effort; for, with the languor of the mind and body, has come also a languor of the will. The deleterious effect of the poison in the system is comprehensive, affecting both body and mind.

As to the diet, although inexpensive, it will, within a few days, become enjoyable,

if the rule about fresh air and exercise is followed. Eat graham or brown bread or biscuits, cheese instead of meat, salads, ripe and only fresh fruit, and drink buttermilk or milk. A little tea, or coffee, will not be especially injurious, although it is better to leave out the coffee. Above, all, eat slowly and chew every mouthful of food thoroughly.

"Fletcherize",— as this method of perfect masticating one's food has come to be called—and it may be remarked here that the world of health owes a good deal to this Mr. Fletcher. He has been the propagandist of one of its best rules. Eating slowly and chewing thoroughly, you will learn the better to enjoy the taste of things. In addition, if practicable, go to bed early and rise early.

And the regimen thus outlined is simply a recipe for ridding the human body of certain "waste products", essentially poisons, that have been allowed to enter it. The remedy is neither expensive nor difficult of adoption, if only the resolve is there. A trial for a week or two will convince the listless and inefficient sufferer. The only demand upon the will-power—and that but a slight one in most instances,—will, at the beginning, be of the sensible experiment.

Now, I am not a "vegetarian" and do not, by any means, advocate a strictly meatless diet. For countless generations, men have lived with meat being a part of their sustenance, and, even now, there are strong races, as, for instance, the Zulus, of South Africa, whose food has, in the past, consisted of meat almost exclusively. However, the conditions of living and of human growth have changed and so have the proper requirements for the sustenance of the human body; the body, itself, has changed in its demands and capabilities. We must adapt ourselves to the new conditions. So, while not advising against the eating of meat at all, I am, most emphatically, in favor of a simpler diet. Were we to eat less of meat and partake of plainer foods, we should be far more healthy.

Our food must, as a matter of course, contain protein; but, as has been shown, we do not require for our physical well-being nearly as much protein as has been supposed. Professor Vort, of Munich, has found that the average man can get along fairly well with about one ounce of pro-

tein a day. Progressive physicians now admit that a number of diseases are attributable to the excessive amount of protein habitually in the system, coupled with an inadequate supply of the necessary mineral elements. These lacking, although necessary, elements can be obtained from vegetable food, while the protein, or albuminous matter, also can be had, not alone from certain vegetables (nuts, fruits, grains), but, from eggs, milk, cheese, and fish. These contain all that is required for the body in health. all the fats, salts, and other elements necessary to sustain life and keep man in his highest state of efficiency.

### The Economic Aspects

There is, too, an economic side to the question of meat-eating that is worthy of consideration, quite apart from that of health. By the abandonment, or nearly that, of a meat diet, the cost of living very often may be reduced by one-fourth or one-half. If the average housewife will study foods and food-values and also the art of cooking, so that she can prepare appetizing dishes from foods other than meat, she will be able to provide an almost infinite variety of enjoyable and nutritious meals for half the money that her table is costing now, while the food that she offers will be more wholesome. Nor need she eschew meat altogether, either. If one "must" have meat, it is not necessary to buy the choicest and most expensive cuts.

The French, above all others, understand and practice the economics of the table. The French housewife will buy 10-cents' worth of tough meat and, with the addition of 3-cents' worth of bread and a vegetable or two and a few condiments, will prepare a stew that will afford a better dinner for three persons than the average American housewife can furnish with her beefsteak, potatoes, and other vegetables, besides the bread, butter, and pastry, for more than ten times the money. What I mean is, that the former menu will be fully as enjoyable, digestible, and nutritious, as the latter, while obviating the danger of overloading the stomach or clogging the system with the threatening waste products.

As a summary, the point I that am trying to make is, that we must eat less and of simpler and less expensive foods. Why is it that we eat too much? What causes

the feeling of hunger. It is not the gastric juice attacking the walls of the stomach. It is not because the sides of the stomach are rubbing against each other. It is not the distended blood-vessels in those walls. It is not any of these things. It is the *systemic* demand for food. When a man really is hungry, he is hungry all over, his legs not less so than his stomach. A person recovering from typhoid fever may eat a hearty meal, yet, his hunger is not appeased, even though his stomach be distended. The *systemic* want has not yet been met, and, so, his appetite continues.

Habit, too, creates demand. Much of our desire for food is not true hunger, but, rather, an abnormal feeling that makes us imagine that we are hungry whenever it is meal-time. Such a habit can be corrected. A well-known Chicago physician, whom I know well, at one time was a victim of this continuous craving for food, eating four hearty meals a day, but, never feeling in good health. He had will, however, and resolved upon a change. Fifteen years ago, he began eating but one moderate meal a day, taking that in the evening. He is never abnormally hungry now and is in good health. It does not follow that his course must be taken as a model, although it affords an illustration of how thoroughly a morbid inclination may be overcome.

We eat too much, and we eat altogether too much meat.

What is perhaps most desirable, in view of what a broader understanding and simple reasoning dictate with regard to eating is, that the table no longer should be considered as an end, but, only as a means for our betterment and for the greater enjoyment and utilization of our lives. Or, as the saying is: "We should eat, to live; not, live, to eat." New eating-habits must form part of human advancement of the future. It is not, perhaps, too farfetched a simile to say, that the table should be "Christianized", and that the time should come when public sentiment will almost instinctively apply the term "Christian" or un-Christian to our food the same as to our morals.

#### Blessings of Rational Eating-Habits

As for the rewards of wise eating, it can fairly be said that they include a great part of all that is involved in the full enjoyment of existence, physically—and in material ways, as well as mentally.

With the simple foods, comes health, and health is the most of happiness. With health, come, not merely vigor and enterprise and a new interest in the affairs of life, but, a keener perception and realization of all that is offered and afforded to the one that lives as he should. Even the physical sense of taste improves, so that the table will be approached with more of a gustatory zest than in the days when, with the meat-clogged system, there came a dulled appetite. There comes an improvement in one's appearance. The teeth are cleaner, the eyes shine brighter, the breath is sweeter, and the "complexion" grows finer both in man and woman when the eating-habits are what they should be. And, not only this, but, a greater promise of longevity is assured, greater promise of old-age extended and serene.

And, as the body returns to health, so does the mind. Oppressive morbid fancies disappear. Optimism takes the place of pessimism; hope and fortitude replace fear and flinching. Improved perception reveals hitherto unthought-of opportunities, and the vigorous mind and body seize upon and improve them. Self-confidence has come and, with self-confidence and clearness of conception, swiftness of decision, and the power of easy action, there come the results that we most seek. To become a healthy human being, is, to become a rejoicing power.

Of course, there are broader and greater considerations than partly selfish ones, which must be borne in mind when the question of our dietary is discussed. As we are the heirs of the past, the errors of which have taught us wisdom, so, also, are we the conservators of the future. There is such a thing as heredity and there is such a thing, too, as the influence of example. We will not consider here these questions relating to the conscience. The problem of what and how much we shall eat is one of the moment and, by saving ourselves, we shall accomplish that which is best for our descendants. We must eat less and largely abandon the eating of so much meat. That is but common sense, and attention to it holds out a great promise. I can think of no better advice to give in closing, than for all to follow this little guidepost to health and happiness. Eat less and play more. Indulge in less fret and fume and enjoy more fruit and fun.

# What Others are Doing

## STEROLIN: A HAND-DISINFECTANT TO REPLACE RUBBER GLOVES

In the *Chemiker-Zeitung* (1913, p. 1247) there is described a liquid for disinfecting the surgeon's hands, so that rubber gloves may be dispensed with; the formula given being:

Acetic acid, Gm. 2.  
Castor oil, Gm. 2.  
Peru balsam, Gm. 3.  
Strongest alcohol, Gm. 93.

The surgeon thoroughly wipes his hands and wrists with wads of absorbent cotton wet with the liquid, continuing for about two minutes, and taking a fresh pledget of cotton every time he wishes to take up more of the liquid. After permitting the alcohol entirely to evaporate he repeats this performance. As soon as the hands have become completely dry the second time, he may begin to operate. In the case of inflamed tissues, a single such treatment is considered sufficient.

The assertion is made that this sterolin not alone washes away the superficial germs, but, penetrates into the skin-pores and there glues them fast temporarily. This is the magic "varnish" or "liquid gloves" about which lately astute newspaper reporters have been growing enthusiastic. (Copied from February, 1914, CLINIC, p. 155.) Additional information anent this subject will be found in the Query Department. (Page 811.)

## THE UNIDENTIFIED PANDEMIC DISEASE (INFLUENZA?)

The *American Journal of Medical Sciences* for September contains an interesting study of "influenza" under the above title, contributed by Major Dudley Roberts, of the Medical Corps, U. S. Army. His communication is based upon observations in about 1500 cases at the Columbia War Hospital, Williamsbridge, New York, and about 200 cases at the U. S. Army General Hospital No. 25, Fort Benjamin Harrison, Indiana.

In view of the frequency with which pneumonitis complicated the influenzal disease, it is interesting to reproduce the clas-

sification offered, Major Roberts having found that, clinically, the cases fall rather sharply into four groups.

Group 1. Mild Peribronchial Cases. These patients do not seem much worse than those that recover completely in two or three days. The temperature is virtually normal; but, they continue to cough and feel ill, frequently breaking out with a cold perspiration on the slightest exertion. While the physical signs may not be conclusive, the radiograms show more or less peribronchial infiltration. They continue to cough and feel weak for several weeks, and, during this period, probably are a source of danger to those about them.

Group 2. Recrudescent Cases. After from one to seven days of apparent convalescence from a mild form of the disease, a few patients were suddenly seized with a chill, coughing, bloody expectoration, and rise of temperature. As a rule, these patients immediately gave signs of massive consolidation. It seemed probable that there had been a cross-infection in the wards after recovery from the original infection.

Group 3. Severe Toxic Cases. Usually from the onset, a severe infection evidenced itself by the patient's appearance, the bloody expectoration, and the harsh breathing-sounds throughout the chest. Frequently it was obvious that the outlook was hopeless, solely from the critical inspection, rather than because of any definite evidence of cardiac failure or pulmonary inflammation. The sputum in these cases is either thick, tenacious, blood-tinged, or, less frequently, a thin serosanguineous fluid or, even, pure blood.

Group 4. Cases of the Fulminant Form. The course of the disease is, occasionally, very rapid, death following the time of "giving up" by only a few hours. The cyanosis is extreme, the dyspnea and anxiety are frightful to behold. In this group, the congestion, exudation of serum, and actual hemorrhage into the bronchi and alveoli is exceptionally severe and the patient is

drowned in his own fluids. The pulmonary edema is not a result of cardiac failure, but, of an unusual reaction of the tissues to this peculiar infection.

It was found that a fatal outcome in pneumonia occurred but rarely, either before the fifth day or after the eleventh day. Recovery by crisis took place in only one-fifth of the cases, and, in this disease, crisis evidently is not the striking phenomenon that it presents in lobar pneumonia.

The mortality in the disease has been from 5 to 10 percent of the individuals affected and from 25 to 40 percent in all cases of recognized pneumonia. Death does not come essentially because of heart failure. Ordinarily, the respirations become shallow and rapid, the dusky pallor grows more pronounced, and consciousness is constantly clouded.

As for the treatment, Major Roberts declares that, aside from rest in bed and isolation from other patients in order to prevent cross-infection, it was unnecessary and useless, in the majority of cases, to attempt to interfere with the course of the disease. Even the relief of symptoms by means of drugs was found unsatisfactory. [This has not been our experience or the experience of many practitioners that have written to us regarding their observations.—Ed.]

For the purpose of determining whether any thing can be done to limit the spread of the inflammatory process and assuring recovery, a well-controlled series of patients was treated by administering mixed vaccines hypodermically, immediately after admission. But, with no apparent result. It seems possible, Major Roberts adds, that the increase of the dose of the injection to the point of causing a protein-reaction would be justified, as a routine, as soon as possible after the onset of the attack.

Major Roberts records that, on October 3, 1918, the intravenous injection of a mixed influenza-vaccine was started, because of the appalling mortality under an expectant plan of treatment. Contrary to the original idea, the conclusion soon was arrived at that good results were secured only when the injection caused a definite "reaction."

Major Roberts regards the exact composition of the vaccine as a minor matter, laying stress more particularly upon the production of the reaction. This reaction

consists in a chill or a definite chilly sensation occurring one-half hour after the injection, accompanied by a rise in the pulse rate and some times by a slight fall in temperature. The temperature then rises, quickly reaching its maximum within one-half to one hour, when, as a rule, it falls sharply, but, usually rises again. The rise following the chill always is transitory and will be overlooked unless the temperature is taken every half hour. The subsequent recession may be down to normal after the first, second or third injection, the disease terminating by crisis.

After the chill, the patient almost invariably feels greatly improved and the change in appearance and lung-signs often is striking. The injections have been routinely repeated every twenty-four hours, although a shorter interval may be found to be advantageous. No ill effects have ever been attributable to this method of treatment.

This mode of treatment was followed by a decided diminution of mortality. In a series of 200 consecutive cases of definite influenza-pneumonia treated according to this plan, the mortality was 9.6 percent. This was in striking contrast with a series of 86 consecutive cases treated under an expectant plan, with a mortality of 31.3 percent.

While under this plan of treatment not all victims can be saved, Major Roberts is convinced that many that would have died recovered promptly in a most striking manner. He concludes that the production of manifest reactions by means of nonspecific protein-injections presents great possibilities in the treatment of any acute infectious disease, particularly, though, of one of unknown etiology and, consequently, offering no possibility of producing an immune animal-serum.

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#### THE TREATMENT OF PUERPERAL SEPTICEMIA, A SPECIAL CONSIDERATION OF INTRAVENOUS STERILIZATION WITH CHLORAZENE AND EUSOL

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It is said that more than eight thousand women die every year in North America from puerperal septicemia; while many thousands more go on to only partial recovery and chronic invalidism. Easily 95 percent of this appalling mortality and



morbidity is preventable by a minimum of interference and a flawless technic.

Puerperal infection, as a rule, is due to the carelessness of the doctor, midwife, nurse, or other persons in attendance, although occasionally cases occur in which it is difficult to fix responsibility.

Gordon G. Copeland (*Canad. Med. Quarterly*, Sept.) says that, in the treatment of such cases, it is desirable to build up the resistance of the patient by rest in bed, plenty of fresh air and sunlight, plenty of fluids, a liberal diet, and quinine and hexamethylenamine by mouth when indicated. Usually, the uterus should be left alone, interference often doing more harm than good by converting what may be a local process into a general septic condition.

When the specific organism has been demonstrated in the bloodstream or the clinical course indicates its probable presence, an antitoxin may be of great advantage if given early and in large doses.

Puerperal septicemia usually is a bacterial or bloodstream infection; therefore, the logical and by far the most effective mode of attack is in the bloodstream itself by intravenous treatment.

As a result of his own experience and that of not a few others, Doctor Copeland believes that we now have in certain chlorine compounds new and powerful therapeutic agents.

The intravenous injection of chlorazene (chloramine-T) and eusol on the one hand and of certain arsenic preparations, such as salvarsan, galy, arsphenamine, diarsenol, arsenobenzol, has been proven beyond doubt to be powerfully germicidal, and several of these are also antitoxic against many of the organisms usually found in this disease, as well as other bloodstream infections that are not puerperal; moreover, in proper doses these drugs do not seem to be harmful to the woman.

His own personal results with chlorazene and, to a very limited extent, with galy, have been strikingly good. On inquiry among men doing progressive work in obstetrics, it was found that they had had similar results.

Given in a suitable manner, both chlorazene and eusol have not had any serious bad effects such as are reported of salvarsan and allied products. Still, we have heard of death following eusol given in-

travenously undiluted, so, one must use great care with these drugs until they are thoroughly investigated. Carrel-Dakin solution given intravenously has caused hemolysis and is, therefore, dangerous. Although a rigor has followed the intravenous injection of chlorazene solution, a similar rigor had occurred in this patient, the day before, as a result of the disease. An occasional rigor would seem to indicate that the maximum dose had been given. The doses advocated are the largest that should be given and are for large women. A smaller dose should be used for small women.

It may be said with fair certainty that, when a diagnosis of puerperal bacteremia is made, and if then 400 mls (Cc.) of  $\frac{1}{4}$ -percent of chlorazene in sterile saline solution is injected into the bloodstream of the infected woman, under aseptic precautions, we may expect the organisms to be killed and their toxins disposed of. If no further organisms enter the blood, this may in itself lead to recovery. If foci of infection remain to reinfect the blood, they should be dealt with locally, if visible, or by further injections of chlorazene, eusol or arsenic preparations at 4 to 5-day intervals. Until animal experimentation with these chlorine compounds shows wherein are the limits of safety, we should go slowly lest we unwittingly do our patient damage.

*Mode of preparation of chlorazene solution.*—Remove three of the 4.6 grain tablets of chlorazene [Abbott's preparation has been used by the author, as it was the first available, and the results here spoken of have all been made with this firm's products] from an original bottle with dry sterile forceps, and drop into a sterile flask containing 100 mls (Cc.) of cold sterile water, preferably freshly distilled. Allow to stand an hour. [Solutions of chlorazene and eusol should not be heated, as this drives off the active agent, chlorine. If this point is not observed, failure will result. This might account for some poor results with eusol.] The tablets being dissolved, the solution is diluted with 300 mls (Cc.) of fresh saline solution warm enough to bring the whole solution to just blood heat. This is injected, under aseptic precautions, into a suitable vein.

*Case Report.*—Mrs. Mary N—e, age 25, in apparent health, 2-para, in labor at

full term for 6 hours; no vaginal examinations were made; presentation L. O. A.; labor was easy and normal throughout. No anesthetic was necessary; there were no lacerations of the perineum. The after-birth was expressed complete; there was no hemorrhage or shock, absolutely no interference; a perfectly normal labor. On the second day post partum, the woman became violently ill, had a high fever, 103° F., and a rigor; the condition was clinically that due to a typical streptococcus bacteremia. The woman was isolated and a blood culture was taken. Then the patient was propped up for drainage, given lots of water and fresh air and a nourishing diet; quinine and urotropin were given by mouth. No internal examinations were made as they seemed quite uncalled for and only could do further damage. The condition rapidly grew worse and on the third day the temperature had risen to 105° F. at 4 p. m. She was desperately ill. At this moment, the report came from the laboratory that the blood culture was teeming with virulent streptococci. An injection of chlorazene was given intravenously. The temperature continued to rise to practically 106° F., when there occurred another rigor and the patient was in extremis. Stimulants were given, with beneficial results, though, for a time, it looked as if the woman were going to die.

The next morning, the patient was sitting up in bed knitting, apparently almost normal, and quite happy; the temperature was just over 97°, and she made an uneventful recovery. Further blood cultures proved negative. The bloods of both, mother and baby, gave a plus-4 Wassermann reaction, and they were treated for syphilis by means of galyl for the mother and calomel inunction for the baby. Seen nine months after, both mother and baby appeared quite well.

Doctor Copeland has a series of 12 cases of puerperal septicemia in which he used chlorazene by intravenous injection. There were two deaths. All but two were sent in already septic, or were seen in consulta-

#### ON THE TREATMENT AND PREVENTION OF PANDEMIC INFLUENZA

In his observations made in about four hundred cases of influenza seen among the Students' Army Training Corps, at West

Virginia University, Morgantown, Prof. Aaron Arkin (*W. Va. Med Jour.* Oct.) became convinced of the undoubted value of the antipneumococcic sera in cases of pneumococcus pneumonia. For the purpose of selecting the suitable antiserum, he says, the type of pneumococcus present should be determined by the Avery, or mouse, method. In type 1 or 2 infection, the serum seems to be specific, while it is of less value in the other types. Out of 20 cases of postinfluenzal pneumococcus pneumonia treated by Doctor Arkin with a polyvalent antipneumococcus serum, only 3 ended fatally. The serum was given as soon as physical signs of pneumonia were discovered.

All pneumonia patients were given digitalis as a matter of routine, the rest of the treatment being symptomatic as there is no specific drug treatment. "Plenty of fresh air but avoiding chilling of patient, liquid diet, catharsis, aspirin 15 to 30 grains per day constituted the early treatment of the influenza patients." [The original reads "Grams," but that undoubtedly is a typographical error. Even 15 to 30 grains of aspirin per day if continued over several days may result in circulatory depression. —Ed.]

As for prophylaxis, Doctor Arkin asserts that there is no vaccine (bacterin) that will prevent influenza. Pneumococcus bacterins will protect against the secondary pneumococcus pneumonia. Perhaps, the streptococcus bacterins will protect against streptococcus complications. Quinine in solution (1:10,000) or a spray of dichloramine-T (2 percent) in chlorcosane are of value in protecting against pneumococcus infection. According to Professor Arkin, the general preventive measures are as follows:

1. Strict isolation and quarantine;
2. Reporting of all cases;
3. Proper face masks used by all attendants; perhaps also goggles;
4. Disinfection of all mouth- and nose-secretions;
5. Careful disinfection of hands;
6. Sterilization of all eating utensils, especially at soda fountains, restaurants, and so forth;
7. Prohibiting of spitting and coughing;
8. Stopping of unnecessary public gatherings;
9. Sheet-cubicle method of separating beds in wards of hospitals, or home.

# Let's Talk it Over

## INFLUENZA, GRIP, PNEUMONITIS

THERE are several things about the past and present epidemics of influenza that have not been mentioned in print, but, which, nevertheless, are of importance to the profession.

I may say that I have paid much attention to the late epidemic of grip (influenza) from its beginning in the early part of September 1918. The reports printed in the press aroused interest and stimulated curiosity from the start, especially after my dealing with a few cases and consulting with several physicians about the 1890 and subsequent epidemics. In this communication I wish to bring out a few phases of treatment, both medical and psychological, that I regard as of interest, not alone with reference to influenza, but, also, as to other diseases.

*Harm Done by Quarantine.*—First of all, those who have been close observers will agree with me that many procedures in the management of influenza have done vastly more harm than good. These are, notably, quarantine and wrong teaching. Fear of quarantine has caused more deaths than did the disease itself, for, people would not send for a physician until it was too late. Moreover, friends, neighbors, and even relatives were prevented from giving needed assistance to those stricken, because of the quarantine.

A visiting nurse asked this question: "Why is it that the Negroes of our city are not afflicted and that not as many die from influenza as do our white people?" This was the answer: "Simply, because the board of health does not interfere with them. When a Negro gets sick, his people send for a physician, while the neighbors are not afraid to help take care of the patients." On the other hand, influenza was so thoroughly advertised as a most contagious disease, a disease that may attack anyone coming near the sick, that people would not venture to go near them, leaving them to their fate. Indeed, it was impossible to

obtain nurses, especially for poor people unable to pay for nursing. The hospitals were filled to overflowing, so that there was no refuge there.

Studying every case of influenza as to its cause and effect, I have not found one that was not brought on by taking cold, by reason of insufficient clothing, exposure to wet and cold, chilly, insufficiently heated rooms and the like. Many persons, when they have caught cold, do not take care of themselves, but, try to "wear it out"; keeping up until they collapse.

*Influenza Not Contagious Nor Acutely Infectious.*—Influenza is neither contagious nor acutely infectious; with ordinary care, one will not contract it. Anyone catching cold will have influenza, whether he be in the same house with a victim or miles away from any case. Let me give two illustrations:

Case 1. A family of ten children and a widowed father. One of the daughters, 14 years of age, acted as housekeeper. Five were in bed with influenza, one little fellow of four, who was not allowed to go out at night, had a slight cough, but, did not get ill enough to be put to bed. The little housekeeper was instructed to take care of herself and was given some medicine to keep her bowels open. She did not contract the disease, although she waited on all of the others, cooking for them, feeding them, and administering the medicines much of the time. The father was requested to stay at home and help to take care of the family, and did so for fully two weeks.

Three of the older children were allowed to keep at work, and came home every evening. None of them became sick enough to have to quit working. The father, who took care of the sick children nearly all day and night, remained entirely free from any symptoms, even of a slight cold. In short, those who were instructed how to care for themselves, remained free from the disease.

Case 2. Family of father, wife, and their 4-months-old babe. The father came down

with "pneumonitis". The wife, not having been out and hardened to the weather since her confinement, had to take care of the husband and do all the chores; day and night, bring in the coal, empty the ashes and slop, wash baby's clothes, and so forth. She soon contracted the disease, so that both were in bed now. The wife's sister came to take care of the two sick people and the infant, in addition to two soldiers on furlough, a brother of the wife and a brother of the husband. All three were instructed how to take care of themselves and the infant for three weeks. Not one of these four contracted influenza.

*Concerning the Treatment.*—Let me state at the start that I do not treat the same of the disease, but, rather, the conditions present.

Ordinarily, all patients exhibiting the usual primary symptoms of influenza require, as a rule, about the same treatment; nevertheless, it is advisable to investigate well before we prescribe, for, the conditions may differ greatly in different patients, and the first course of treatment may be of greatest importance.

In many of the fever-cases of adults, I begin with a course of calomel, soda, and podophyllin compound, followed, one hour after the last tablet was taken, by a laxative saline draught. This, as a sheet-anchor can not be excelled in most of the infectious cases.

The tablets that I carry, contain: Calomel, gr. 1; sodium bicarbonate, grs. 2; podophyllin, gr.  $\frac{1}{4}$ ; ipecac, gr.  $\frac{1}{4}$ . Dose: one tablet every half hour, repeated two, three or four times. One hour after the last dose, a laxative saline, preferably a teaspoonful of epsom salt in a glass of hot water is to be taken. This is repeated every half hour until the bowels move. If the bowels should not move in one hour after the last dose, an enema of plain warm water is given—not soapsuds or any other medicament. Rather, I repeat the warm-water enema in one hour after that, if required. This usually relieves the congestion and paves the way for future medication.

Children receive the same course, graded according to age, of course. The compressed tablet is divided into  $\frac{1}{16}$ ths,  $\frac{1}{4}$ ths, or  $\frac{1}{8}$ s, or, one may use the  $\frac{1}{10}$ -grain tablets and follow the same course.

In order to make the saline draught palatable, I dissolve the epsom salt and sweeten it well. I make the solution con-

centrated, so that it may be dispensed in teaspoonful doses. The calomel tablets may be crushed and mixed with sugar, for the same reason.

*Prophylactic Measures.*—As a prophylactic for influenza-pneumonitis, adults are ordered to take  $2\frac{1}{2}$  grains of iodized calcium every two or three hours, children,  $\frac{1}{6}$  to 1 grain. The nurse is instructed to crush the tablet and mix with sugar and place the powder in the mouth, allowing it to dissolve and be swallowed with the saliva. This greatly aids in stopping the tickling cough and relieving the sore throat.

Interdict drinking cold water. The cold increases the congestion, causes more thirst, increases the catarrhal mucus in the stomach, and retards every effort for recovery. Hot water dilutes the mucus in the stomach, assists nature by reducing the congestion, favors diaphoresis and elimination, while being a stimulant and tonic. I interdict cold water in all my fever-cases. It is remarkable how much better patients do with hot instead of cold water in all fever-cases, including throat-cases, such as scarlatina, diphtheria, tonsillitis, and so forth.

I usually leave some  $\frac{1}{2}$ -grain tablets of iodized calcium, to be given every two to four hours for a day or two, to be followed the next day by calcium sulphide, 1 grain for adults,  $\frac{1}{6}$  grain for children, repeated three or four times a day. I also tell how to handle the case. Often this one call is all that is required. The family is directed to let me know how the patient is getting along. I instruct them to keep the patient warm, but, not so that he sweats; give nothing to eat, at least no solids, for a day or two, and let him drink much hot water.

*If Pneumonia Supervenes.*—If pneumonia supervenes, I order a sweater-jacket to be put on the patient, designed to cover the chest, neck, shoulders, and buttocks. I prefer a woolen sweater to a cotton jacket.

The cough is controlled and the nose protected with a mixture of 1 to 2 percent of camphomenthol oil in liquid paraffin, applying 5 to 15 drops as often as required to overcome the tickling cough and sore throat. The same oil is used in the nose by twisting a film of cotton wool around a toothpick, which the patient or the nurse is instructed to apply up in the nostrils. It not only stops the coryza and clears the nose, but, it heals the mucous membrane.

If the cough is severe, I furnish a coryza-tablet containing camphor, atropine,

and quinine, also a combination consisting of atropine sulphate, 1/600 grain; tincture of aconite, U. S. P., 1890, 1 minim; calomel, 1/6 grain; and morphine sulphate, 1/36 grain. One of each of the granules is given every three or four hours.

If this does not control the cough, I instruct the patient to place one or a part of one of the coryza-tablets in the mouth and allow it to dissolve slowly by holding it between the gum and the cheek. Thus, the patient is relieved of his cough and can sleep without being disturbed. This is an excellent way to control cough in pregnant women suffering from influenza.

To control the fever in influenza, pneumonia, gastroenteritis, typhoid fever, and so forth, I give no coaltar preparations, because of the ill effects often resulting. I have been called to patients to treat after-effects (at least that is what I attributed the complications to), weakness and deferred recuperation, several instances in which the pulse rate was as low as 42 per minute and alternating one beat in four, the patient so weak and cyanotic that dissolution seemed but a question of a short time. [It seems incredible that any physician would push coaltar derivatives to such a degree of depression. Rightly used, they certainly do not produce it, according to our experience.—Ed.]

*To Combat the Bad Consequences of Coaltar Preparations.*—Having treated several of such cases after the physicians seem to have made failures, it may be well to outline a general plan of treatment that has proven successful in my hands.

Heart stimulants, of course, present one of the first indications that come to mind. I seldom give a hypodermic in these cases; a few minutes' time ordinarily is of little moment in cases that have been progressing for days or weeks, although a sudden collapse may have come on. Mostly there is exhaustion. The first thing to do is, to give a granule of glonoin and one of the "dosimetric trinity," to be crushed and dissolved in the mouth. This will satisfy the patient until a regular diagnosis is established and the medicine prepared.

Here, then, I prepare a solution of 25 granules of the "dosimetric trinity" and 10 or 15 granules of glonoin in 25 drams of water, to be taken in teaspoonful doses every three or four hours until improvement begins, thereafter three times a day,

three hours after each meal; this being kept up for several days.

For promoting the lagging appetite, I prescribe a mixture of tincture of nuxvomica and of quassia, in a little water, half an hour before meals, and, if needed, some such digestive as papain compound, taken with a glass of hot water, two hours after meals. Hot water seems to be one of the best stimulants in these cases, while cold water chills the patient.

*Management of the Infectious Fever-Cases.*—When called to a severe case of pneumonia or other case of infectious fever, I prepare the medicine and usually administer a dose of it, and I stay long enough to show how to manage the patient. I instruct the attendant how to count the pulse; I leave two preparations for the control of the fever, namely, the "defervescent compound No. 1" and the "dosimetric trinity No. 1"; also, if indications seem to indicate, I leave sufficient glonoin.

I tell the attendant to give, when the pulse beats 130 or more, a teaspoonful of the fever-mixture until the pulse count is ten or twenty beats less, that is to say, has gone down to 120 or to 110, then to give a dose only every three hours. If the pulse will not go down, then apply a hot-water stupe (a towel wrung out of a 2-percent solution of epsom salts) or a turpentine stupe of 15 drops of the oil to each pint of hot water, applying over the abdomen and chest and covering with a dry cloth.

If the pulse should go still lower, or if the fever should disappear entirely, or if the patient should show weakness, then leave off the fever-medicine (the defervescent mixture) and give the dosimetric, or heart-stimulant, every half hour, one teaspoonful until improvement sets in, up to four times, then every three or four hours. In this way, the temperature can be controlled almost to perfection, provided the alimentary canal is in proper condition.

The mixture for fever consists (for adults) of 25 granules of the defervescent compound No. 1 in 25 drams of water, in a glass labeled with full instructions.

The heart-mixture usually consists of 25 granules of the dosimetric trinity and 10

<sup>1</sup>Defervescent Comp. No. 1, contains, Aconitine hydrobromide, gr. 1-800; Digitalin, gr. 1-64; Veratrine hydrochloride, gr. 1-128.

<sup>2</sup>Dosimetric Trinity No. 1, contains, Aconitine hydrobromide, gr. 1-800; Digitalin, gr. 1-64; Strychnine arsenate, gr. 1-128.—The differential indications are self-evident.—Ed.



or 15 granules of glonoin in 25 drams of water, in a glass also labeled with full instructions.

For children, according to age, the same number of drams of water, but 1 granule for each year and 1 extra; that is, for a 2-year-old, 3 granules, and so forth.

The mixture for children is sweetened so as to taste pleasant; also, for adults, the defervescent (fever) mixture is sweetened, in order to prevent nausea. Some people are nauseated by the aconite-mixture if it is not sweetened.

The dosimetric (heart) mixture I prefer to use without sugar, because it will give better and quicker results with its natural taste.

The other remedies, the remedies that are of prime importance and upon which I depend, are those that will cause a proper cleaning out of the bowels, and they usually are begun in fractional doses of calomel and podophyllin. Then, one hour after the last dose of the former, follow with a laxative saline solution, also in broken doses, every half hour until the bowels have moved or three or four doses. If the bowels do not move in one hour, the attendant is to administer an enema of warm water; after which, the bowels are seen to so that there is an evacuation at least twice a day.

If the fever continues, a small dose of the laxative saline is administered two or three times a day, ordinarily one-half hour before breakfast and a half hour before supper.

When the bowels are in active condition, the fever usually is controlled with little or no trouble. Intestinal antiseptics may do some good, and there is no reason why recourse should not be had to them, and, depending upon the conditions, they may do much to hasten recovery.

*Enemas of Great Value.*—If there is much internal fever, dryness and redness of the tongue, restlessness and so forth, conditions often (mostly) owing to toxemia in the alimentary canal, an enema of warm water will give great relief. The same thing may be said of bloatedness, an enema usually relieving that, too.

When the patient does not improve after the saline taken internally, order an enema of warm water, to empty the colon, this to be followed one-half or one hour later by an enema consisting of a tablespoonful of epsom salt, a teaspoonful of sodium bicar-

bonate, and a teaspoonful of table salt dissolved in a pint of water. This is to be retained all night, if that is possible. This saline enema is to be commended in all cases of inflammation of the intestine, when much gas fermentation results from the ingestion of salines by mouth, also when it is desirable to reduce the medication by way of the stomach. [It would be well worth while, we believe, to employ chlorazene in these cases.—Ed.]

It is wonderful how quickly and comfortably the saline enema relieves the fever in the colon in cases of typhoid fever or of enteritis from almost any cause. It is a last resort trying to save a victim of spinal meningitis or of fever in the abdomen owing to almost any infectious disease. A patient's life may be saved by this means after his becoming moribund, even when the sphincter already ceases to react. If the injection is discharged, wait one-half or one hour, then repeat the dose.

Another most effective remedy is *hot fomentations*, especially the epsom-salt and the turpentine-stupes. I have, again and again, ordered a hot turpentine-stupe (15 drops to the pint of hot water) to be applied over the abdomen of a typhoid-fever patient when he was considered beyond aid. Using the hot turpentine-stupes at this time as the main remedy will save the patient. This and the hot epsom-salt stupe should not be forgotten in abdominal fever or inflammation, the result of infection of any kind. Let me once more repeat that cold water must not be drunk nor ever applied in any case of fever. Let the patient drink all the hot water he wants, it will do everything that cold water can to benefit him, yet, do no harm. Hot-water applications will reduce the fever and stimulate the patient, never doing harm.

Patients treated in this manner will seldom be troubled with much delirium, they do not get so thirsty and cough very little. Cold water increases the production of mucus (slime); consequently, fever and thirst.

*The Error of Quarantining for Influenza.*—I had only one death from influenza complicated with pneumonia, or pneumonitis, following influenza, in which I was the first physician to be called. It was a boy of four years, every one of the whole family of five people being sick, and to whom neither relatives nor neighbors would come to give help before this boy was in danger of death. The only reason for not

coming in to help this sick family was, the quarantine placard, which forbade any person to enter or leave the house, under threat of prosecution.

I wish to state here, that I have given special attention to the contagiousness of this so-called Spanish influenza during this epidemic, beginning with September, 1918, and am still making observations, besides having consulted with other physicians who study this disease, and I have become firmly of the opinion that there was, and is, no more danger of contagion than from the well-known grip. We may as well quarantine the atmosphere as the influenza, as a means of preventing the spread of it.

The next common error is, the so-called "fresh-air" craze. The patient is to lie in a room with windows wide open. This causes draughts, and the patient catches cold every little while. Relapses, also, often result from this error, while, frequently, this is the cause of patients not rallying enough even to become subject to relapses; since they die before relapse can take place.

I instruct the nurse to open windows opposite the side from where the wind blows; then the impure air will escape and no wind will strike the patient.

If the room must be aired quickly, the patient must be covered well, the nurse staying in the room with the patient until the doors or windows again are closed.

There are two classes of cases in which, it seems, I have had particular success during this epidemic.

The first are cases of pregnancy complicated with pneumonia, cough, and influenza. The treatment is along the same order as described in the foregoing, except that I devote particular attention trying to stop the cough, while avoiding opiates as much as possible. If the cough is controlled, there is no danger of abortion or miscarriage. Fortunately, I have lost none of these patients. However, it may be in place, to tell of two extraordinary cases in my experience.

A woman, pregnant in the eighth month, suffering from influenza complicated with pneumonia and edema of the lungs, and as to whom, by the way, the husband was informed by her attending physician that there was no hope for her recovery. I was sent for as a last chance. I found her coughing constantly and hardly able to breathe, owing to serious interference by the frothy accumulation from the lungs.

As there seemed to be no hope, I resorted to heroic measures. I gave her three tablet-triturations, one consisting of morphine sulphate, gr. 1/36; atropine sulphate, gr. 1/600; tincture of aconite, U. S. P. 1890, 1 minim; and calomel, gr. 1/6; another consisting of quinine sulphate, gr. 1/2; ammonium chloride, gr. 1/2; camphor, gr. 1/2; opium, gr. 1/10; extract of belladonna, gr. 1/10; and extract of aconite root, gr. 1/10; the third one containing morphine sulphate, gr. 1/12; atropine sulphate, gr. 1/600; and caffeine citrate, gr. 1/6; the three given at one dose. At the same time, a tablet-trituration of 1/100 grain of glonoin, to be dissolved in the mouth, and this followed by another, a coryza-tablet containing camphor, to be dissolved in the mouth. I ordered a hot-water-bag to the feet, with shoulders and arms kept under cover. She begged for cold water, but, this I interdicted, ordering hot water as much as she wanted to drink.

I remained with her about four hours, and instructed the neighbor woman nursing her how to watch the case, how to administer the medicine, and so forth. I provided a heart-tonic, and ordered a saline enema as soon as that could be administered. This was done while I was there, and a saline enema was to follow after the bowels had moved, the enema to be retained, or to be repeated if it came away. The enema consisted of a tablespoonful of epsom salt, a teaspoonful of table-salt, and a teaspoonful of sodium bicarbonate, in one pint of warm water. This was to reduce the fever and to quiet the cough.

The frothing at the mouth began to grow less within one hour and the cough almost disappeared. The woman made an uninterrupted recovery, and I delivered her of a healthy girl about four weeks after that strenuous night, entirely well now. You will notice that the opium given was not enough to injure the fetus, and the antidote balanced it very well.

Another similar case did not pan out so well, although it was equally successful in so far as the recovery of the mother is concerned. This woman had not been quite so near to death's door. It was her first spell of severe sickness and she had had no doctor to treat her for influenza and pneumonia complicated by edema of the lungs. After she was out of danger (convalescent), she still was troubled with some cough, but, especially with some wakeful-

ness at night, was not getting well and strong as quickly as she and her neighbor friends thought that she should. One day when I called again, I was informed that my medicine would not make her sleep enough, so, they had sent for another doctor, who gave her medicine which assured her rest. She was pregnant in her fifth month. I found a small vial containing camphorated tincture of opium, of which she was to take so many drops every four hours. She showed the effects of it then.

In about one week, she aborted a dead (blue) fetus. Had she gone on with my treatment, that would not have been the result. Opium is not well borne by the fetus, but, when given in small doses, protected with atropine as above described, there is little or no danger. The camphorated tablet is of value for controlling the cough, especially when allowed to dissolve in the mouth.

It seems I have had my share of pneumonia complicated by edema of the lungs, but, fortunately, had no deaths, except where the patient was moribund at the time I was called for the first time. Patients that had been in the hands of other physicians or had not sent for a physician until too late, died within two to five hours after my visit at the bedside.

One of the most helpful remedies in these cases is, the hot wet compress or stupe over the chest and abdomen. I prefer the turpentine-stupe when not counterindicated. Some patients do not bear the oil of turpentine well. For those, I prescribe the epsom-salt stupe, of 2-percent strength, and where there is danger of too much turpentine this is an excellent substitute.

*No Milk for Fever-Patients.*—It is remarkable how much harm is being done by feeding milk to fever-patients, even to patients whose digestive power is reduced to almost nothing. This applies to grownups as well as to infants and children. All else goes well, but, doctors cannot understand why the patient is troubled by biliousness, gas, fever, and so forth.

Milk, when drunk, forms large tough curds, which are indigestible, putrefy, irritate, and form toxins. If milk is mixed with cereals, the curds will be small and not so liable to form toxins, the small curds are likely to pass through the intestine without causing any irritation, and are not so liable to give rise to the formation of green mucus. One of the first instruc-

tions should be, to take the infant from the breast and to feed it barley-water or some thin broth from other cereals, until the child's digestive organs are improved. Adults should be warned not to drink milk during the fever-stage or during the period of inability to digest foods. If milk is to be ingested at all during such a time, it should be mixed with cereals, such as well-cooked oatmeal, farina, rice, and so on. Milk and toast do well with some, the question in the main being to prevent the formation of large indigestible curds.

As for toxic conditions caused by indigestion, these include spasms of almost every nature, including cerebrospinal and others. The first thing to do should be, to empty the bowels. If not possible to give medicines by mouth, then do so per rectum—warm-water enemas, following with a saline solution, to be retained as long as possible. High fevers, with spasms, yield to this treatment in a remarkable manner. I prefer the epsom-salt, soda and salt solution.

For an infant, I prescribe epsom salt, drs. 4; sodium bicarbonate, dr. 1; table-salt, dr. 1, dissolved in 1 pint of warm water. Inject with an infant-syringe, 1 or 2 ounces, causing it to be retained as long as possible, and repeating as often as it seems necessary, every one to four hours.

For an adult, inject the whole pint, and repeat in one hour if the first dose is not retained. This will reduce the fever and quiet restlessness in nearly every toxic case, resulting from inflammation of the bowels or even of the lungs. And you can not beat this for paratyphoid and typhoid fevers.

R. WILLMAN.

St. Joseph, Mo.

[While we cordially commend Doctor Willman's well-considered therapy in these cases, we can not agree with him in all his theoretical considerations. The infectious nature of influenza is not disproved by his arguments; also, a *reasonable* quarantine is surely advisable.—Ed.]

## INFLUENZA STATISTICS AND ITS TREATMENT

While I have no particular desire to rush into print, still, I am full of "flu" and must unload on someone; and, as you peo-

ple are always cheerful about such things, you are my victims.

Most of the articles that I have seen on the subject of influenza deal with possible causes, pathologic findings at postmortem examinations, and so on. My cases were few in comparison with those of others, perhaps; nevertheless, I have worked out a part of the treatment to something like a definite plan. If there is such a thing as a specific treatment, I should like to hear of it; if not, I hope *THE CLINIC* will publish a detailed plan of treatment of the symptoms that arise.

During the late epidemic, I was the only doctor in a country-practice district comprising about 700 families. A few of the cases went to outside doctors.

The first typical influenza-case in this district occurred on October 6, 1918, and the last one on March 5, 1919; a period of five months. In that time, I attended 457 cases. These, together with those patients that went to the outside doctors, represents less than 15 percent of the population.

According to the statistics so far available, there does not seem to be a very marked variation in the different localities in the percentage of people affected. The disease seemed to be more active where people were crowded, that is, where too many people were in one house. Before and since the epidemic, there have occurred sporadic cases that might be cataloged as influenza; however, as they lacked the typical features of the epidemic, I have excluded them from this report.

Among my 457 cases, there were 37 marked pneumonias, with 5 deaths. Twelve pregnant women had the disease with no pneumonia, or miscarriage or death following.

The largest number of cases under treatment at one time was 82. The largest number of cases that I saw in any one day was 52. They were scattered over a territory of 25 by 30 miles. I mention this because, in my case, as well as in the case of hundreds of other overworked doctors, it had an important bearing on treatment and results, on account of the time-element per case. This scattering of the patients interfered with careful treatment. But, a similar condition prevailed everywhere. It seems to me that the mortality can be largely attributed to this condition. The treatment was, of course, symptomatic.

For prophylaxis, I tried Mayo's vaccine, but, am not satisfied that it was of much value. I tried calcium sulphide, without benefit. Vapocresoline proved of service. Creolin, vaporized and sprinkled on the floors was useful. When I no longer could get vapocresoline or creolin, I used "sheep-dip" with equal results. The benefit consisted in, frequently, limiting the number of cases in that particular family in proportion to those originally infected.

This, briefly, was my treatment:

Headache: I tried aspirin for a little while, but, did not like its effect. Later, I relied upon gelsemoid, and this proved fairly satisfactory.

Cough: Apomorphine mostly was useless. Emetoid, ditto. Codeine was of some benefit when the cough was very harsh. Later I used sanguinarine nitrate associated with codeine and emetoid, with pretty good results. Vaporized preparations of creolin also were of benefit.

Sore-throat: Baptisoid was almost specific for this, usually giving relief after a few doses. Gargles and mouth-washes were not effective, so far as the patient was concerned.

Circulation: One of the peculiar symptoms observed: When the temperature rose above 102° F., and lots of times when it didn't, the heart was dilated. Strychnine and digitalin were useless or worse than useless. Glonoin seemed to help some. Free purgation, together with defervescent drugs, or veratrine alone, seemed to do the most good.

Nosebleed: This was a very frequent symptom. It seemed, on the whole, to be beneficial to the patient; in fact, so much so, that I bled one pneumonia-patient as much as I dared; however, without benefit. If the nosebleed became too troublesome or too severe, I used an adrenalin-spray, with excellent results.

Bowels: Epsom salt, calomel, Hinkle's pills, all were effective.

External: Flannel jacket, camphorated oil, kerosene and lard, mustard plasters.

General treatment: Antiseptics, mouth- and throat-washes, intestinal antiseptics. For intestinal antiseptics, I used the sulphocarbolates and copper arsenite and found both of them useful.

To raise resistance: I found echinacea valuable. I tried Mulford's vaccine, but, could not see that I got much benefit from

it. I thought fresh air valuable, until I got a group of cases in which I could not secure ventilation and in which the conditions were extremely unsanitary, yet, they did just as well as did the rest. So, I then decided that people should be kept in the surroundings to which they were used.

Diet: I don't know. I tried various diets, without material change in the results. Of course, while the fever was on, a light diet should have been proper; however, not everyone followed that, by any means. If the bowels were kept free, I could not see that diet mattered much.

As experience was being gained, the necessity for a very careful and thorough examination of each individual case at each visit became apparent.

One of the first symptoms of dangerous infection I found to be soreness of the larynx, trachea, and adjacent tissues. Baptisoid almost invariably relieved this in a few hours.

Beginning lung complications could almost always be detected a day or two before they showed systemic effects, and, during that time, was the opportunity to treat them successfully. A careful examination of the lungs would reveal areas of congestion. I have not tabulated these findings as pneumonia; still, I want to insist that attention to this condition cut down the incidence of pneumonia to almost nothing whenever time would allow me to attend to them as I wished.

My treatment was, to grease the skin with any available animal-fat, apply a mustard plaster over the spot where it was needed till the skin was red, then follow with applications of dry heat for an hour, then grease the chest with camphorated oil or kerosene and lard, put on a flannel jacket and let them rest for two hours. Then I repeated the whole procedure.

It requires repeated examinations to find the spots that need this local treatment. The scattered multitude of the patients made it difficult to see them often enough to give good service. As in most other diseases, close attention to the individual case goes very far toward eliminating the dangerous features.

In my cases of pregnant women, these were all given viburnoid, gr. 1-3 to 1-2 every two hours, in addition to any other indicated treatment. The temperature in all of them dropped to normal within two

days after beginning treatment. The after-course was uneventful. None died. None miscarried, even though they were already flowing when the treatment was begun. In none pneumonia supervened. However, *eight of the twelve* have since given birth to dead babies.

Some interesting points have come under my observation. Sequels in my cases were few. There occurred no empyema; no chronic lung affections, so far as I know. The tuberculous victims have all come through finely and are better than before. Chronic appendix-cases have usually been made worse. Practically in all cases in which the temperature rose above 102° the heart was dilated. In almost all of the worst cases, the patients were between the ages of 14 and 30, and in people that were sound. The milder the attack, the more lingering the after-effects.

E. I. RAYMOND.

Wellington, Colo.

[This is an interesting report of excellent work done. It is evident that our correspondent employed "brains" in generous doses with the remedies administered to his patients; and this, after all, is an important, indeed, the most important, factor. The difficulty of giving to the patients all the service that they required, undoubtedly contributed to the severity of the disease. This factor was active everywhere, but, has not been stressed sufficiently.

As for the administration of biologic remedies, the results of the various bacterins advocated for use in influenza and influenza-pneumonia were decidedly contradictory. The present writer never could convince himself that these remedies were of great advantage when used *curatively*. On the other hand, he is convinced that, *for prophylaxis*, bacterins have proved of decided value.

The main point in the treatment, in our opinion, is, to place the organism in a condition of greatest resistance early in the disease. Fortunately, the public has acquired a wholesome fear of "flu" and, usually, patients will consult a physician early. Then is the time to use antiseptics by spray and atomizer (especially, chlorazene solution and dichloramine-T in chlorcosane) in order to overcome, if possible, the infection of the mucous membranes in the nasal passages and the pharynx. As



an internal antiseptic, chlorazene in 5-grain doses, in solution, seems to be coming into great favor. We have cognizance of some really encouraging results.

To raise the general resistance, we emphatically admit the great value of echinacea as stated by Doctor Raymond. However, we are convinced that hypodermic injections of nuclein solution will have an effect at least equal to that of echinacea.

As for the fever, it must be remembered that a rising temperature is one of the systemic means of defense. Therefore, it is a mistake to depress it to normal; indeed, such a procedure often is followed by subnormal temperature, and by serious results. The management of the fever temperature should extend only to keeping it within safe bounds. In an infectious disease like influenza, a fever temperature of 101° F., can not be said to be dangerous, and if the physician succeeds in preventing higher temperature rises, he will have done much to aid his patient in overcoming the infection.

As for a "specific" treatment—in view of the complicated and, indeed, but imperfectly understood etiology of the disease, it is not possible to work out any method of treatment that could be called specific. Patients must be treated on the basis of measures—hygienic and systemic—that are known to be successful in the management of infectious affections. Then, the symptoms must be met as they arise.—Ed.]

#### HE SUBSCRIBED FOR THREE YEARS

Since our boys "cleaned up" the kaiser,  
And "cleaned out" his old pig sty,  
We'll "keep clean," you bet your eye, Sir,

From the autocratic sore.

For the alkaloidal way, Sir,  
Let me confidently say, Sir,  
Is the doctrine for today, Sir,

And for ever, ever more.

Munday, Texas.

G. A. TROTT.

#### PROPRIETARY MEDICINES, AND EFFICIENCY IN PRACTICE

With the fierce onslaught upon proprietary medicines, made by some medical journals and not a few medical practitioners, I am not in sympathy in thought nor in deed. There are some proprietary medicines that are very useful and which

may be prescribed with advantage to the patient. This fact one finds out after trial, and the willingness to try frequently is based upon two things: First, the knowledge of the constituents of the medicines and, second, faith, in the character of the individual or the firm that advertises them. On the other hand, as we well know, there are countless proprietary medicines that often are useless or injurious, and as to which we can not rely upon the statements made about them nor can be sure of their composition. Much harm may, and does, result from taking these.

However, from the use of any proprietary medicine, even the best, an evil results; for, it leads directly to much self-medication, which usually is harmful to the patient. In this matter, it is up to the personal knowledge and conscience of the practitioner to prescribe any given proprietary medicine or not. Laws, even the most ethical, can not control his actions. In this matter, his own will controls.

One hears it said that the physician should be able to formulate prescriptions that are quite equal to those already prepared for him. But, this is not true, in many instances. For the busy practitioner



Doctor Robinson's Country Home.

to carry in his brain the precise formulas of things he wishes to prescribe, often is difficult and wearisome. Furthermore, the formula that he adopts may make an unpalatable preparation, so that the patient objects to taking it. Thus, real efficiency is neutralized and confidence in the doctor lessened.

I do not wish anyone to believe for a moment that I am not utterly opposed to quackery. I am! But, at the same time, I uphold the right of everyone to think and act squarely and with that rarest of gifts

—good common sense. Of course, the efficiency of any medicine is greatly augmented by the personal attitude of the practitioner. If he is essentially a skeptic or if he attaches too great importance to accurate diagnosis or laboratory-research, the drug or the combination will fail to produce the wished-for effects. This fact is known and really not mysterious.

Good physiology would teach us that proper mental influences are largely valuable. They are, at times, singularly curative. I have had this made evident to me on many occasions. I believe that, through it, even changes in tissues may, possibly, result; I am sure that functional consequences of great value resulting directly therefrom are not uncommon. They can be observed, if keenly and carefully looked for.

We are far too much the followers of our teachers and do not think and do as we, ourselves, determine according to our own conviction and experience. Of course, we should, here, discriminate closely between the belief and affirmation of one that has had but limited opportunity to see and know and another whose occasions of this kind have been extensive and considerable.

I am confident that, in writing the foregoing, if it be well considered, I am expressing the inward thoughts of very many old and experienced practitioners. I could readily illustrate what I have said in favor of certain proprietary medicines, were I not satisfied that such testimony would be taken advantage of for supporting preparations that really do great harm and should be absolutely suppressed.

This brief article has been inspired by two valuable editorials that appeared in the July issue of *THE AMERICAN JOURNAL OF CLINICAL MEDICINE*. They bore the titles, respectively, "Anent Medical Business Efficiency" and "The Problem of the Medical Quack." I agree thoroughly, with the spirit and purpose of both these editorials, which deserve to be widely read. I only wish, in a brief and convincing way, to touch upon the other side.

This other side, put in a few words, is, first, and emphatically, that, if I were not free at present to prescribe certain proprietary medicines, I should be greatly handicapped in doing good to the patients consulting me. Also, I "deny," with the edi-

tor, "that medical practice can, in the long run, be conducted with a sole eye to efficiency and with everything human excluded." First, and above all, there must be, in practice, a vast well of human love and sympathy, without fear that it ever will be drained dry!

BEVERLEY ROBINSON.

New York City.

#### "SHERLOCK HOLMES GETS BUSY"

A chemist of our acquaintance states that the chemistry of Captain Barry, in the interesting story published last month, is faulty. He says that, on adding caustic soda to the chlorinated water, sodium chloride and sodium hypochlorite would form and sodium hypochlorite is very strongly germicidal. Consequently, the typhoid germs would be killed, and an epidemic would not result. If the man had used sodium thiosulphate, that would have converted the chlorine into sodium chloride and the water would then have been non-germicidal. Hence, the typhoid-bacillus cultures placed into the drinking water would have contaminated it, with serious consequences to those drinking of it.

#### ARBUTIN FOR URINE-RETENTION

I had some arbutin granules,, gr. 1-6, lying in my desk for five years. In November, last, a pneumonia patient, Mr. S., 46 years old, developed urinary retention and had to be catheterized three times, when I happened to think of the arbutin granules. I gave one every hour until effect, and in twelve hours, there was *some* effect, in quantity and frequency of urination. Four granules a day were used for several days and no more use of catheter was made.

E. P. S. MILLER.

Chicago, Ill.

[This is fine, not only for the therapeutic effect of arbutin, but, also, for the keeping qualities of the granules.—Ed.]

#### LETTERS FROM FRANCE—XIV

History shows that one of the unvarying concomitants of all great wars has been a rapid and tremendous increase in secret diseases to which soldiers on leave are exposed by the congregation of lewd women in all of the great centers. By rea-

son of the call to arms of all the able-bodied men, policemen as well as others, the regulation and control of the social evil is relaxed and soon assumes proportions hard to suppress or control. Our military leaders were well aware of the existing conditions in France and, so, adopted extraordinary precautions to protect our troops.

Nothing done by America in the great war has stupefied or puzzled the French more than the enormous expenditures on the numerous leave-areas created behind the American Army; the numberless troupes of actors, singers, performers; the cinemas, bands, orchestras, baseball, football games, clubs, and dance-halls; reading-rooms, writing-rooms, to say nothing of the eating-places, canteens, supply-depots stocked with candies and many luxuries unknown to the French soldier as well as to the civilian up to two years prior to the arrival in France of the American Army. It seemed that this great new army had come to France on a holiday, bent upon amusement rather than a vital struggle of life and death and the saving of a great cause, for the safety and benefit of future generations; but, gradually there filtered through the public mind an appreciation, that, behind all of this apparent careless and expensive frivolity, lay a great purpose for moral and physical good, directed to the one end of occupying the time and attention of the soldier during his leisure hours and of creating stamina and a moral support for the fighting force.

All France is fully alive to the unprecedented increase in the social evil since the outbreak of the present war and, as the knowledge has spread that the American Auxiliary Organizations were enlisting the services of the leading Americans to come to France and were expending hundreds of millions in the effort and with the object of furnishing constantly such variety of interesting and attractive forms of occupation and amusement as to keep our men away from less desirable places and less dangerous companions, there sprang into life a growing desire on the part of our French friends to become a part of these forces for good and help in every way to further the far-reaching influences thrown out and around the American soldier for his aid and protection; and this has resulted in a movement, throughout

France, as revolutionary as any social movement ever born within its borders: Nothing less, than the breaking down of the barrier that from time immemorial has kept French family life as safe from invasion as any Turkish harem.

Inspired with the idea of facilitating the acquaintance and intercourse between Americans and the French, a group of French people founded "French Homes," an association designed to extend the hospitality of French families to the men of the American Expeditionary Forces. The appeal of this society, through the press, for rooms where Americans might find comfortable quarters and family-life at reasonable rates, met with instant response.

Americans that have lived in France and know the French are aware that no homes are more shut to the stranger or foreigner than are those of France. It is almost impossible for an outsider to hope to enter these sacred precincts, and this is one of the prime factors that has prevented foreigners from forming a just estimate of the real life of the French home.

This barrier was broken down by a few lines in the leading papers, an appeal to French family-circles for the homeless boys whom America sent to fight for France, and old aristocratic mansions opened their gates wide to America's sons. Some of the noblest families bade Americans welcome to their mansions, where family-life would await them.

"It is little enough we can do to make some return for all they have done for us," wrote a proud old duke, "but, what little we can do, let the Americans know, we are proud and happy to do."

"I have not been used to receive perfect strangers," writes a countess, "but, all that my house can offer will be gladly given to help some American to feel that he has a home in France, and my daughters speak English."

"I have two rooms," writes an old father. "They were my two sons' rooms. Both have been killed on the battlefield. I cannot do better than to offer what was theirs to two American boys, brothers in arms of my two heroes."

And, in all ranks of society, from the highest to the humblest, the same touching trait is to be found.

Here is a poor woman, who lives by selling vegetables; she opens up her hum-

ble home to an American boy; a writer offers to share his "den" with an Ally; an artist, his studio; here a clerk in a shop says that "his children may help to make up for a humble lodging in making some lad feel at home over here." And, thus, offers flowed in from everywhere.

I but recently returned from my fur-lough, spent in Nice, on the Mediterranean, which has been created one of the greatest of the leave-areas, and there I found an organization of marvelous variety and efficiency.

Out in the ocean, bordering the Promenade des Anglais, stands the Jettée Promenade, a great palace built for the amusement of the people of Nice. This building has been taken over for the American Army. Two bands play daily in the two great halls forming the two wings and separated by the width of the main building, which contains a theatre, concert-hall, dance-hall, where an orchestra plays for dancing every afternoon and evening, and a great cafe with numerous tables where refreshments are served at cost, while a canteen supply-store sells all sorts of things including tobacco in every form, candies, and sweets. This building is reserved exclusively for the soldiers. Officers are not admitted.

On the Place Massina, there is a beautiful theater for officers offering a great variety of free nightly performances. Also the first floor of a beautiful building, consisting of a dozen rooms, fitted as a club, with an enormous hall for dancing that will accommodate 200 couples, where an orchestra plays from 3 to 6 and from 8 to midnight. This club is constantly crowded, and here there is demonstrated a working-agreement between the Army authorities and local residents that is productive of most excellent results.

No lady is admitted, except by a personal card, to secure which, she must furnish her name, address, and two city references. This application is turned over to the local Committee of French Homes, who investigate and pass upon the qualification of the applicant. By this means, all undesirable "ladies" are excluded and, as a result, the family of the prefect, the mayor of the city, and all the leading families frequent the club and join in helping to entertain visiting officers. As a result of these casual

acquaintances, many of these officers are invited to the leading homes of Nice.

Now many Americans will learn to know French women as they never knew them; not, the painted dolls they meet in places of amusements, but, the proud and wonderful women that helped to keep up the courage of absent husbands and sons, whose delicate hands knew how to tend dreadful wounds, whose fragile strength never grew weary of long days beside the sick and dying in the hospitals. They will learn to know girls as pure and sweet as their own, and, thanks to this social revolution, the timeworn prejudice about "frivolous French women," which the American traveler has related upon his return from a trip abroad, may be corrected.

B. SHERWOOD-DUNN

Paris, France.

### "SUCCESSFUL COLLECTING"

In the November, 1910, number of CLINICAL MEDICINE, there appeared an article contributed by the late Dr. William J. Watson, entitled "System for the General Practitioner." In the closing paragraph of this article, on page 1205, the author referred to two little books, one titled "How to write Letters That Win," and the other, "Successful Collecting."

Some correspondents in India are anxious to secure both these booklets. It has been possible to locate the first-mentioned one, but, no one consulted could refer us to the publishers of the book on "Successful Collecting."

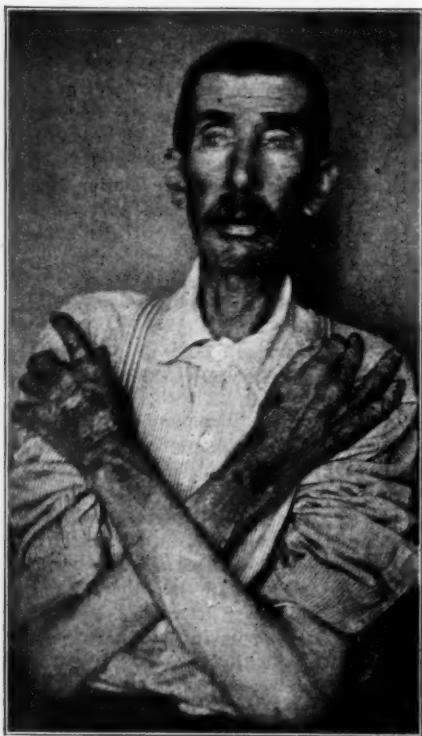
If any of the readers of CLINICAL MEDICINE can help us out in this respect, they will do us a great service.

### PELLAGRA, AND ITS TREATMENT

Pellagra, or erythema endemicum, as it is also known, is a disease, which, during the past ten years, has been gaining ground in our country, previous to which time it prevailed, principally, in certain European countries. I encountered the first case of pellagra in my practice in the year 1907, but, since then, have had to treat a number of others.

In every instance at the time that the victims presented themselves for treatment, the skin manifestations were the first symptom to cause them to seek medical attention. At the close of winter and

as the spring began to open, an intense redness would be noticed on the back of the hands, in some cases deepening to a deep-bronze or purple, accompanied by a tingling, burning sensation and, as ex-



pressed by some, a feeling as if needles were being pricked into the back of the hand. To this, there were added faulty digestion and nutrition, a feeling of lassitude, headache, great fatigue, vertigo, and pain in the epigastrium followed by diarrhea. A feeling of weakness and indisposition would continue throughout the summer and autumn until cold weather set in when all conditions would begin to improve and quite disappear, until about the middle of March, when they would reappear in a more aggravated form.

Observation has taught me that, in the majority of cases, the cutaneous manifestations are the last symptoms to appear. The skin-disorder seems to develop in three stages. First, your attention is directed to a congested condition of the skin, giving it a thick, spongy feeling; second,

pigmentation and scaliness appear; third, we observe a tendency toward atrophic thinning. To be more specific, the first appearance is a dark-red, discoloration, this, later, changing to a dark-brown or bronze. It makes its appearance upon the uncovered portions of the body (hands, wrists, and up to the elbow, if short sleeves are worn; neck and face into the margin of the hair). The skin of the face at first is thin, but, gradually thickens. Many patients complain of an intense itch-



ing and, later, of impairment or loss of sensation.

In a few cases there is an inflammation which seems to affect the superficial layers of the skin and, in others, to extend to the deeper strata. The epidermis desquamates, the amount greatly varying in different patients. The skin may, at some time, have a fissured appearance, some-



what shriveled and senile. Sometimes vesicles, bullæ, and petechiæ may be associated with the other manifestations.

All of the foregoing features become more pronounced with each successive attack, and all these manifestations may be repeated year after year, while each succeeding year may add entirely new symptoms, until, at last, there becomes noticeable decided muscular weakness ac-

however, probably owing to the involvement of the cerebrospinal system.

After the patient has had several annual attacks, the pulse becomes weak and thready; there is continual muscular weakness and pain in the head and in the spinal column. Sometimes a very pronounced stupor is noted, which not infrequently eventuates in insanity, death ensuing sooner or later.

I have found this disease to occur most frequently among the poor classes, although the wealthy are, by no means, immune against its ravages. It has been found in nearly all European countries, Italy and Roumania leading. Pellagra was at first thought to be brought about by the incessant use of corn-meal bread, but, later and more thorough investigations have proven this idea untenable. This, also, has been my own experience. Some of my patients suffering from the disease have never been users of corn-bread.

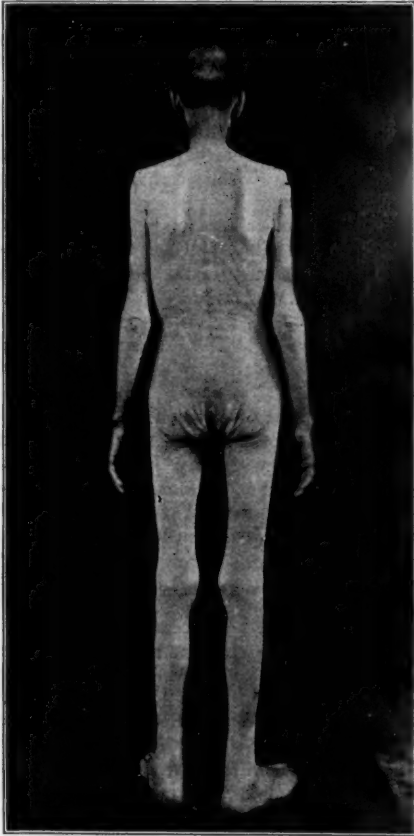
I am inclined to the idea that insanitary conditions and surroundings have much to do with its etiology. Still, I must admit that among some of my patients the sanitary conditions and surroundings were excellent, they being among the well-to-do and even wealthy. In all of my cases, without exception, I have found the nutrition impaired. However, after all, I must confess that still I am at sea as to the real cause of this insidious scourge.

The deranged condition of the central sympathetic nervous system I believe to be very largely caused by overwhelming amount of toxins produced in the intestines and thrown into the general circulation. The cutaneous changes I attribute to the mild congestion and irritation and to the atrophy of the rete.

In mild attacks, a favorable *prognosis* may be safely given provided a carefully selected diet and sanitary surroundings are being ensured. Severe cases, as a rule, prove fatal, with a duration of from three to seven years; others may be prolonged to ten or fifteen years.

*As for treatment*, I do not claim to have any specific. The main, and chief, condition is, to provide the patient with the proper food and good hygienic surroundings, together with efforts to improve the general health.

Medicinally, I have accomplished the best results with arsenic, iron and sodium. The best results will be attained by admin-



companied by mental deficiency and a pronounced despondency or melancholia.

In the advanced stage, when the skin presents the dark-purplish red or brown appearance, there may be present extensive exfoliation, while the fingers assume a drawn, claw-like flexed position, and seem immobile. The patient gradually becomes debilitated and very greatly emaciated, brought about by the faulty digestion and the resulting diarrhea, in part,

istering these agents intramuscularly, using them in the form of iron arsenate and sodium cacodylate, as put up commercially in ampules. I administer the two alternately, giving the iron arsenate one day and the sodium cacodylate the next.

Let me describe two cases from practice.

Case 1. Woman, age 35, married, no children. Father dead, at 65, of asthma; mother living, age 60, health good; four brothers living, in good health; three sisters living, health good; no brothers or sisters dead. She had all the diseases of childhood; health was good up to the age of 30, when the present disease made its appearance. Had lived in Idaho for five years, was living there when the skin manifestations first appeared on hands and face, and up to the time of my examination had had three returns (each spring).

This particular case differed from my others, in that it was worse upon the face and neck than upon the hands and forearms. Her face was horrible to look upon, with no resemblance of her former self, to the extent that she was not recognizable to friends, who had been intimate with her. She stated that she felt in perfect health during the winter months, but, about the middle of March the trouble would make its appearance. I pronounced hers a typical mild case of pellagra; and put her upon the iron, arsenic, and sodium course. She improved from the first and, by the following December, her trouble had entirely disappeared. However, before spring, she left the community and I lost sight of her, not knowing as to the permanency of my treatment.

Case 2. This patient who now is under treatment, is, and has been, the most interesting, for many reasons, of any that I have ever examined. With this case, I submit several photographs, presenting back and front views. They will show more than I can hope to express in words.

Man, age 57; height, 5 feet 11 inches; weight, 88 pounds. Father died, at 62, of pneumonia; mother living, age 75, in good health; two brothers living, aged 40 and 45, respectively; one sister living, aged 42, health good. One brother died of pneumonia; one sister died of cancer, at 45; one sister died in childbirth.

He has had all of the diseases of childhood, has had pneumonia, typhoid and scarlet-fevers. With those exceptions, his

health has been good up to eighteen months ago, when he was taken to jail, where he was confined for a year and a half. From this, he dates the beginning of his present disease. When taken to jail, he weighed 165 pounds. I first saw him February 22 last, when his weight was 88 pounds. He presented all of the skin manifestations of a typical case of pellagra, accompanied by marked diarrhea of a dysenteric character. His feet were greatly swollen, as shown by the picture. His mental condition was very bad. There were continual muttering delirium, marked despondency, weakness and emaciation, he being barely able to stand upon his feet. Taking all symptoms into consideration, the prognosis was, and could be, no other than grave. I did not expect him to live more than three or four weeks.

His hygienic surroundings were carefully looked after, his diet was prescribed, and the treatment with the iron, arsenic, and sodium was begun, in form described above.

He was weighed one month after I instituted the treatment, and was found to have gained 12 pounds. He was weighed again upon April 3, when he had gained a total of 18 pounds since February 4. His mind has very greatly improved and, at the present time, it looks as if we were going to bring about a complete cure from what, at first, was considered worse than hopeless.

J. C. McCREARY.

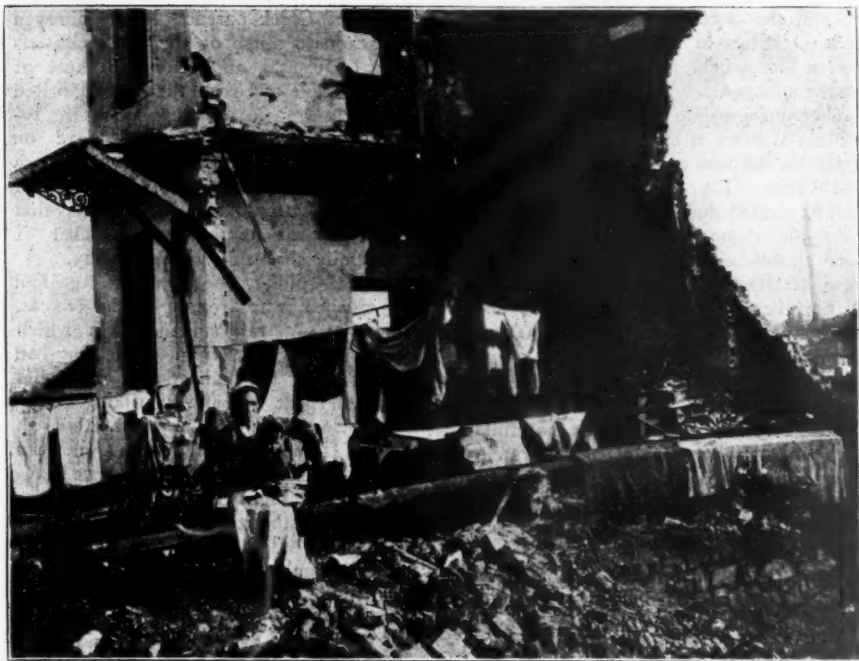
Eddyville, Ky.

### RED CROSS NOTES

The clinic was the medium through which the American Red Cross was enabled to raise the health rate of the peoples of the United States and of Europe and to promulgate educational propaganda.

In America, the Red Cross, in cooperation with the Federal Public Health Service, has established clinics in towns near thirty-two cantonments, army-posts and naval bases. For the six months ending December 31, 1918, an appropriation of \$945,845 was made for this sanitary service.

The special work of these health-units was, to combat communicable diseases among civilians, to the end that the welfare of the soldiers might not be threatened. Thousands of dollars were spent on bacterins and serums. In one clinic, at



American Red Cross Balkan Survey.

A home in Salonika in ruins. The little child was just recovering from double pneumonia, when this picture was taken. Three families live in this house. December 1918.

Fort Worth, with but three doctors and nurses in attendance, 3,000 persons were vaccinated against typhoid fever in one day—a stupendous achievement! Clinics for maternity-cases and child-welfare were established. Hundreds of persons, many of whom could not otherwise have afforded it, were thus enabled to secure medical advice, gratis.

The majority of such persons were woefully ignorant of the proper care of themselves and of their children, and, to such persons, the nurses, in a kindly, helpful, impersonal way, taught the simple and sanitary methods of hygiene, food preparation, and so on. Not the prescribing of medicines, so much as the giving of medical advice, together with the distribution of educational propaganda and the securing of more sanitary living-conditions, was the principal work of these clinics in the United States. In Europe, the great needs of the population forced them a step forward.

When the Red Cross Commission arrived in Russia, in July, 1917, the then Premier

Kerensky was in power. He gave them a cordial welcome, and activities were immediately started up. Infant-mortality was high and to combat this evil a system of clinics was opened. These did most efficient work. During the month of October alone, the contents of 50,000 cases of condensed milk were distributed through the clinics; for, undernourishment was found to be the principal cause of ill-health and disease. These clinics were in operation in all the larger Russian towns until the tumultuous arrival of the Red Guard forced the Red Cross from the country.

The especial sphere of activity in which the French clinics operated was among the tuberculous refugees and the children. At Evian, through which the repatriated people passed in droves, 13,708 children were examined, in two months, at the Red Cross clinic. Under Doctor Maynard Ladd of the Red Cross, clinics were opened in the factories, town-halls, and schools of France and, in these, 1,765 children were treated during a single month. In the schools in Nesle, 500 children were reached month-

ly, and the doctors and nurses extended their activities to the surrounding towns, clinics being held twice weekly in seven nearby villages.

The American Hostels for Refugees constituted a series of clinics operated in Paris and its suburbs by Doctor Cabot, of the Red Cross. The first clinic, during one month, treated 302 persons.

At the request of the Queen, clinics were established in Belgium and, through these, 600,000 refugees were supplied with their medical needs. In Italy, a like service was performed among the 400,000 families dependent upon charity.

Systems of clinics were established in Serbia, Roumania, Greece, Palestine, and Siberia, to combat the diseases that follow war. In all these countries, the principal diseases treated in the clinics were tuberculosis and typhus, both of which had gained a strong hold on the impoverished peoples. Typhus has ceased to be epidemic, through the efforts of the clinics.

Red Cross representatives found the teeth of the people of all countries to be in a bad condition. On the entire Serbian front there was but one dentist. Therefore, American dentists were brought over and provided with "motor clinics." In these, they traveled about Serbia, giving aid to soldiers and civilians. Dental clinics also were operated in connection with the French public schools.

Literature was prepared, by the Educational Committee, in the languages of the several nationalities and with the utmost care, so that the sensibilities of the members of the native medical profession and of the laity should not be offended. This literature was kept in all the clinics and distributed among the patients, who, in turn, disseminated among their friends, this literature and information.

A Red Cross news-item from Macedonia tells how, with a razor, a spool of cotton thread, and a small quantity of ether and chloroform, Miss Marie P. Kouroyen, an American Red Cross nurse, performed a life-or-death operation, as a result of which she has come to be known by the homeless and starving Greek refugees in that region, as "the American angel."

Born of Greek parents, Miss Kouroyen is a graduate nurse of the Massachusetts General Hospital, at Boston. Because of her knowledge of Greek, the American Red Cross sent her to Macedonia, where typhus, smallpox, and cholera tread on each other's heels and where the refugees bury their dead beneath the dirt floors of their shell-shattered shacks, in order that the bread-cards of the dead member of their family shall not be taken away.

A Greek soldier, one of whose legs had been crushed, was brought to the boxcar, standing on a railroad-siding, in which Miss Kouroyen was living. Something had to be done for the man at once, and Miss Kouroyen spent no time in talking.

Borrowing a razor from Lieut. Abner J. Cobb, of Denver, Colorado, an American Red Cross fieldworker who just was shaving by candle-light in the boxcar, Miss Kouroyen anesthetized her patient with her small supply of ether and chloroform and performed an amputation, using cotton thread to tie the arteries and veins.

Despite the prophecy of a local doctor, that the aged patient would not live through the night, Miss Kouroyen some time later received a visit from this patient. He had an American artificial limb made for him in the American Red Cross artificial-leg factory for Greek war-cripples in Athens.

#### DO FACE-MASKS PROTECT?

There was a little germ,  
Such a sly, little worm,  
A-sailing all around by the million;  
And then a little mask  
Made a fine place to bask,  
And he settled on the thing by the billion.

There was a little man  
Who was scared by the ban,  
And he wore this little mask like a muzzle.  
But, the germ got in its work,  
Like a busy little Turk;  
And the little man was worried o'er the puzzle.

But, when he figured out  
That the way to keep 'em out,  
Was, not, to trap 'em on his upper story;  
It was just a bit too late;  
For, the germ had took the bait.  
And the little man was on his way to Glory.  
H. E. NEGLEY.

Indianapolis, Ind.

# Just Among Friends

A DEPARTMENT OF GOOD MEDICINE AND GOOD CHEER FOR THE WAYFARING DOCTOR

Conducted by GEORGE F. BUTLER, A. M., M. D.

## The Actual and the Ideal

[Continued from October issue, page 737.]

GREAT books can be understood only by great men; for, as a man can not write, so neither can he read what he has not cultivated within himself. And herein lies the safety and eternal life of the true in literature, as opposed to the false; for, it appeals to the great thoughts of the mind; and the great thoughts were never yet wholly smothered even in the most selfish mind, while the false thoughts always are dying or changing form.

But, when we hear that a given writer is eternal, we can not accept that dictum literally; we take it, rather, as we do the myths of the ancients, looking through the childish letter to the quickening spirit within—as, although Lynceus was said to be able to see into the interior of the earth, we know that that meant that he had an intimate knowledge of nature, as our scientists have it today. Not so many years ago, before the times of Max Mueller, Homer was regarded as the earliest poet of antiquity. Now we hear, aside from the controversy over the true authorship of the Iliad and the Odyssey, not only that Linus, Orpheus, Musæus preceded Homer in his own country, but, that he was the imitator of Valmiki, the epic poet of India. Whom, then, did Valmiki imitate and where are his works? And again, Valmiki's predecessors, who were they and where are their works? Where are the works, what are the names of the prototypes of the writers of the Pentateuch, or of Sanchoniathon, or Jerombaal, or Manu, or Kapila, or the Vedic Rishis? The names of these ancient writers are with their bodies, merged in the common dust of earth. However, their thoughts—those true thoughts for which their pens were the channels through which they flowed to men from the Godhead—these live now with as vital a life as ever but, are being ascribed by the world to their followers—to Plato, to Aristotle, to

Epictetus, to Carlyle, to Emerson, to Spinoza.

It is the thought that lives, if it is worthy. In eternity, names have no place. The thoughts that sparkle with splendid fire in Shakespere have sparkled, and will continue to sparkle, through all time, when the name of Shakespere shall be forgotten. For, although they were, indeed, Shakespere's thoughts, they are also the thoughts of broad humanity, and, like all beauties of nature, belong to whomever has the wisdom to see and enjoy them, and will, in turn, be attributed to him if he has the faculty of expressing in new phrases what he sees. "He is not debtor to Plato, but, to the idea to which Plato also was debtor."

Neither will a wise man expect to find any book all truth. And herein lies the cause of its death, as a book; that which it contains of universal truth alone being eternal. And the minds of even the greatest men and writers are various, are built in with moods, and none of them is quite devoid of fantasy. In the books of Montaigne—the man of the world *par excellence*—we find the same truths that lighten the somber pages of Augustine, the saint. Yet, in the vagaries arising from the individual viewpoints of these authors, how different are they! The truths which are common to both will live, be quoted, loved, passed onward from generation to generation, the language gradually changing to meet the comprehension of the different ages, through all eternity; but, their books will, some time, be no more known, because of their imperfections, even were these so slight as to escape the eye of all but the very seer.

The same reason that prevents one book from being all truth prevents another from being all falsehood. "The foolishhest book is like a leaky boat floating on a sea of wisdom—some of the wisdom will get in,



anyhow," says Doctor Holmes. Indeed, it must be plain that no class of books is wholly in vain; for, without the lower and intermediate steps, ascent to the higher and highest would be impossible for some persons perhaps for the majority. Nobody would expect a boy of ten years or a man who had neglected to cultivate the unselfish, finer side of his nature to be able to enter at once into the beauties of that class of literature of which Emerson stands as the head and front and quickening symbol in this age. Therefore, without the lesser authors, there would be no Emersons, no Carlyles, no Fichtes, no Goethes for the world.

It is true that one may cultivate the errors of his authors, whoever these authors may be, instead of their truths; but, that is each reader's own affair, and, if he leans to falsehood rather than to truth, he still would find means to cultivate it if no writer ever had existed. Embryo men like their truths adulterated and will not accept them unless they are adulterated; they can not recognize the bare truth as palatable mental food. It alarms their selfishness. It seems always about to cost them something. With them, it is as Bacon says, "a mixture of a lie doth ever add pleasure." But, the more they absorb of truth—little of which they would get but for the mixture of falsehood which attracts them toward it—the less they will have it adulterated, until in due season they must have Emersons, Carlyles, Fichtes, Goethes, and nothing less than these will do for them. The time comes, too, when these minds will be willing to leave for others the same steps by which they themselves have mounted, as the boy at school mounts from the English alphabet to Greek and Sanscrit, and will look on in love and interest as the lowly stars in the east climb spirally up their heaven.

The Divine Idea—as Fichte called it—that rules the world, and which itself is immutable, requires in every age new interpreters, writers, and speakers capable of expressing this divine idea in terms that will be understood in that particular age. Moreover, since the men of the same period not all have the same understanding, being unable to comprehend the same writers, not only must every age have its interpreter, but, every class of mind in that age

must have its interpreter, too. The man who considers Emerson dull or visionary or impractical will be attracted to those writers who are on his own level and will read them until, having assimilated their points of view, he is prepared to ascend a little higher. And so on.

Therefore, the popular writers of any age stand as types of the tastes and intellectual heights of that age. They write nothing new, they but put old thoughts into new dresses, to meet the fashion of their time. They are born of the demand of the contemporaneous mind of man, and, when the mind of man changes, as it inevitably will, the sun of their popularity sets. The voice of the people is the voice of God, so far as the people themselves are concerned; and their popular writers, no less than their popular preachers, statesmen, and actors, are the living utterances of that voice to them. But, intermingled with these, even in the mind of the lowest of them—as ether in the air and all denser bodies—is universal truth, sparkling with living beauty, here a pinpoint spark, there a starry effulgence, unconquerable, immovable, eternal. No writer can be so poor that he can not at times do it reverence; and the proof that his work is necessary for somebody's good, no matter how puerile it may seem to you and me, is, that it exists.

If all men would be willing to see the naked truth when it is presented to them, there never would have been need of a book since Valmiki; indeed, there never would have been need of any book at all, for, nature itself, which is everywhere and wide open to its true lovers, contains all truth, is, in very fact, all truth itself for those who have the eyes. However, as there are men of variously cultivated love, so there must be writers for them all—as there must be swamps for snakes, bowers for birds, houses for men, palaces for kings, worlds for Christs. For, the people and their writers are one, the former the cause, the latter the effect; the people are the soil, the writers its production; the people are the mind of man, their writers are that mind's concrete manifestation, result, symbol, showing to all the seeing part of humanity the degree of cultivation which the mind of the people has attained. And each individual reader has, in this

truth, an infallible guide to a knowledge of his own grade of culture, for, the class of books which he reads with pleasure and profit indicates, by its height in the scale, just where he stands.

However, the lower in the scale a man finds himself by this rule, the less will he believe its truth; for, as Max Mueller says: "The older I grow, the more I feel convinced that nothing vexes people so much and hardens them in their dogged resistance to reforms as will undeniable facts and unanswerable arguments." And, had the German-English sage been the first to learn this psychological truth, we should not have had that doctrine of nonresistance which was promulgated nineteen hundred years ago in Palestine and Rome, and earlier, still, by Socrates and Plato in Greece, and, before that, by Xenophanes, Pythagoras, and Buddha, and nobody cares to say how long before that by Manu, Kapila, and the prototypes of the Vedic Rishis.

Perhaps the real difficulty, however, lies, not so much in finding out the uselessness of argument in the cause of truth (for, there was never yet a wise man to whom that fact has not early come home) as in remembering and using the knowledge so as to preclude argument. In the heat of enthusiasm or indignation, men cry, "Down with it! How? Never mind how! Down with it!" Reform is all, method nothing. Then it is that the gods laugh and wonder to see blind mortals attacking Proteus with an ax and kicking against Pluto's solid masonry with naked feet. And still the voice of Pythagoras comes persistently ringing down the ages, laden with mighty import to his mental offspring: "Do not stir the fire with a sword."

And, ah! the subtlety of these "letters that bring no cure" to state or statesmen. Emerson preaches it in England, and is smiled at for his pains. Why? Because he *preaches* it. Nobody could very well object to his practicing it; but, when the thought takes shape in words, it bears its defeat with it, for, then it becomes self-contradictory by its very nature. Twenty-three hundred years ago, Plato felt constrained to say: "Of all those whose arguments are left to the present day, no one has ever condemned injustice or praised justice, otherwise than as respects the re-

pute, honors, and emoluments arising therefrom." And not so very long ago, after all these ages of culture, progress, and love, Landor did not hesitate to insist broadly that men urge reform and goodness in others, so that they themselves might not suffer by them. If this is the effect that preaching and argument has upon the minds of the great, what can we expect of the multitude, which, at last, always takes its mental bias from its leaders!

It was, therefore, with very good reason that the ancients assigned logic to the muse Euterpe, she who plays on two pipes at once, and gave it the lowest place among the arts, while mathematics was awarded the chief honors even among the sciences. For, mathematics is busied solely with direct results: its only concern is, to arrive at its goal by the shortest route, its office is, to build; and, when its work is done, there is the question solved beyond all doubt, beyond appeal, enduring as time, its one modest affirmative annihilating even the possibility of contradiction. But, logic, while it is convincing and admirable to those who already are convinced or to those who wish to be convinced, is regarded by the opposition as an evidence merely of the subtlety and ability and falsity of the arguer, rather than as proof of the justice of his cause; and those among the neutrals who do not content themselves with a similar sentiment, without being in the least influenced in their beliefs, have only to meet another logician to be teetered back again.

These are reasons why Montaigne felt constrained to say, "I would rather be a good horseman than a good logician." Hegesias' motto was, "Neither to hate nor accuse, but, to instruct." Cardinal Newman puts it thus: "Deductions have no power of persuasion. The heart is commonly reached, not through reason, but, through imagination. After all, man is not a reasoning animal, he is a seeing, feeling, contemplative, acting animal." And Carlyle says of genius, what may be said of most human attributes, that it grows upon contradiction, as the vital germ pushes itself through the dull soil and lives by what strove to bury it. "The only true government of men," he says, again, "is, to show them what to do." It will not answer to tell them, merely. They will not believe until they see acts as well as hear words.

[To be continued.]

# Among the Books

## LERCH: "RATIONAL THERAPY"

Rational Therapy. By Otto Lerch, A. M., M. D. Troy, N. Y.: The Southworth Company, Publishers: 1919. Price \$7.00.

The author of this book, a therapist of note, inaugurates a new departure in his present contribution to treatises on the treatment of disease. The physician who consults it expecting to find the customary information on what tincture or fluid-extract or other preparations of a certain drug is "good for" a certain trouble, will be disappointed: while that physician who devotes himself to its careful study will find his understanding as to the principles of treating patients, afflicted with certain diseases, enlarged and his viewpoint of therapeutic methods in general widened.

Doctor Lerch emphasizes first and foremost that *blood alone* cures and that all methods used to treat disease must serve to purify it and to bring it where it is needed. In accordance with this view, the "healing power of nature" is granted its full credit in bringing about recovery from disease, and copious information is presented how this healing power of nature is to be guided and how its possible vagaries may be controlled for the best interest of the diseased organism.

The various therapeutic measures are taken up successively, each chapter being divided in two parts; the first discussing the general principles of the particular subject, while in the second its application, in the diseases of the various systems and organs of the body, is considered.

Accordingly, separate chapters are devoted to air, including climate, light and so forth; to diet; rest, massage and exercise; hydrotherapy; electrotherapy; psychotherapy; hyperemia; vaccine and serum therapy; organotherapy; and chemotherapy, including drug treatment.

In the discussion of all these various methods and means of treatment, the author always is careful to point out how their proper utilization will serve to purify

and strengthen the depraved and vitiated blood of the patient and how in this manner improvement in the condition of the patient is produced.

In speaking of the sun-bath, the author has omitted reference to the beautiful work done by Rollier, of Leysin, of which an interesting account appeared, for instance, in the special tuberculosis numbers issued by the *Interstate Medical Journal*, in 1914. In referring to Asheville, North Carolina, the author places its altitude at 1,900 feet, while it actually is 2,350 (see "Reference Handbook of the Medical Sciences," art. "Asheville.")

The article on diet may well be studied and taken to heart. The author shows the importance of environment, including living conditions of the patient, his occupation, the climate in which he lives, his powers of assimilating food. Against the prevailing amateur notions of many "dietitians," the author prefers to control improvement by weight, appearance and subjective feeling, claiming that in general practice a close figuring of calories becomes a negligible factor. The object of the dietetic treatment, he says, is to produce blood, as far as possible, free from impurities and containing in sufficient quantity the elements necessary to produce heat and energy as needed, and to replace the burnt-up body albumen and fat.

In like manner, rest and massage and exercise, all of which might be considered together, (rest being a negative form of exercise), are discussed, first, as to their general principles and rationale, then, in their application in certain diseases; and so on through the book. In the chapter on psychotherapy, we find the important declaration (not new, but, frequently neglected) that the mind presides over every function of the body and over every process of life. Consequently, it is important to influence the mind favorably.

In the chapter on vaccine and serum therapy, the problems of immunity are taken up briefly and the rationale of bio-

logic treatment is considered in this as well as in the following chapter, that on organo-therapy.

The last chapter, that on chemotherapy, or drug treatment, consists, first, of a discussion of various groups of drugs, somewhat in the style of the *materia medica*, and this is followed by a part on chemotherapy in special diseases in which the principles of drug treatment are outlined in such a manner as to afford excellent guidance for the studious physician. An appendix containing a list of drugs and a complete index covering fifty-two printed pages complete the work.

Mechanically, the publishers started out to turn out a handsome volume, printed with clear, readable type on good paper. Unfortunately, the text contains an altogether undue number of typographical errors, some of them even being mistakes in the spelling of names (for instance, Brehm for Brehmer). In a subsequent edition, which we trust will be called for soon, these mechanical imperfections can easily be removed, and on that occasion the Reviewer suggests adherence to the style of spelling scientific terms that is in vogue in all well-edited medical journals, as well as in the dictionaries.

It may be added that numerous illustrations are provided where they are of service. Especially are the original photographs illustrating exercise and massage to be commended.

Altogether, we have enjoyed reading the book and have derived from it much useful information, while, in many points of which we had been cognizant, our memory was refreshed. We can recommend it cordially and hope that Doctor Lerch's views in many respects will find wide acceptance.

#### "WHITE AND MARTIN'S GENITO-URINARY SURGERY"

White and Martin's Genitourinary Surgery and Venereal Diseases. By Edward Martin, A. M., M. D., Benjamin A. Thomas, A. M., M. D., and Stirling W. Moorhead, M. D. Illustrated with 422 engravings and 21 colored plates. Tenth edition. Philadelphia: The J. B. Lippincott Company. 1917. Price \$7.00.

This textbook on genitourinary surgery and venereal diseases is widely known and

its value fully recognized as is manifested by the fact that it has appeared in its tenth edition. In the chapter on cystoscopy, we miss reference to Luys's direct-vision cystoscope, which, to us, seems to have many advantages over the others now in vogue. However, the discussion of the various genitourinary diseases is remarkably complete, and, especially has the problem of syphilis found extensive attention, 12 chapters out of 44 being devoted to that disease alone. White and Martin's book really does not need any commendation. It will be received on its own merits, without hesitation.

#### HARE: "THERAPEUTICS"

A text-Book of Practical Therapeutics, With Especial Reference to the Application of Remedial Measures to Disease and Their Employment Upon A Rational Basis. By Hobart Amory Hare, M. D. Seventeenth Edition, Enlarged, Thoroughly Revised, and Largely Rewritten. Illustrated With 145 Engravings and 6 Plates. Philadelphia: Lea and Febiger. 1918. Price \$4.75.

The high estimation in which Hare's "Therapeutics" is held by physicians generally, as witnessed by the fact that it has reached its seventeenth edition, is fully justified by the declaration, on the part of the author, that each new edition of a textbook can not be merely a reprint but must be a revision based upon the progress made in laboratory experiments and especially in clinical observations. Accordingly, the author has come to the conclusion that the preparation of the seventeenth edition of a book requires more care and judgment than the writing of the first if the author desires to have it represent things as they are and not as they have been. The Reviewer desires to urge those who are fortunate enough to possess or acquire this latest edition of Hare's book on Therapeutics to read the preface with great care.

Realizing that the object of this book is, to place the subject of treatment before the reader so that it may be applied at the bedside in a rational manner, Doctor Hare has been careful to test and evaluate the results of laboratory investigators with great discretion and to accept them only in so far as they were proved in actual

bedside experience. He asserts justly that bedside experience and clinical observation must afford the ultimate proof of laboratory results.

In this present edition, the results of war experiences have been included. Accordingly, the uses of Dakin's fluid (better, chlorazene) and dichloramine-T, and the treatment of burns by paraffin are discussed. The methods of prescribing a proper diet for the sick now are described more in detail than formerly, particularly in respect to children and diabetics. Those drugs that heretofore were made in Germany or under German patents and now are manufactured in this country have received the names under which they are known officially, for instance, arsphenamine for salvarsan, procaine for novocaine. It will be found, indeed, that the present edition is in considerable part new and that it contains many important changes over former editions of the same work.

#### LEWIS: "THE SOLDIER'S HEART."

The Soldier's Heart and the Effort Syndrome. By Thomas Lewis, M. D., F. R. C. P. Physician of the Staff of the Medical Research Committee, etc. New York. Paul B. Hoeber, 1919. Price \$2.25.

Among many other phases of medical knowledge, in which the experiences gained by medical officers during the war record a distinct advancement over our prior knowledge, is to be considered the extensive study of the heart, both in health and under the influence of functional as well as in organic disturbances. The "effort-syndrome," the "irritable heart of soldiers," the "disordered action of the heart," are terms that have become familiar to physicians having to do with soldiers, either prospective (in examining drafted men) or in active service or after discharge. Much has been written on the subject, in periodical medical literature and in monographs. Yet, much still remains to be cleared up more definitely.

Dr. Thomas Lewis has to his credit several books devoted to affections of the heart, studied by him and which he has described with particular care. The "collection of war-time notes" before us, as he modestly describes his little treatise, contains much food for fruitful investigation and study; also, much useful guidance for the application of war-time lessons to

civilian life. For, as the author truly says in the preface: "If we are to reap the full benefit of our experiences during this war, these experiences are to be treated on a broader basis. To endow them with permanent value, they are to be correlated with the experiences of civilian life. If it is possible, it is important that some "prognostic and therapeutic lessons that are of general application be learned."

#### DAVIS: "PLASTIC SURGERY"

Plastic Surgery, Its Principles and Practice. By John Staige Davis, Ph. B., M. D. With 864 Illustrations Containing 1637 Figures. Philadelphia: P. Blakiston's Sons & Co. 1919. Price \$10.00.

By plastic and reconstructive surgery is understood that branch of surgery that deals with the repair of defects and malformation, whether congenital or acquired, and with the restoration of function and the improvement of appearance. Plastic surgery is one of those "modern" methods of treatment that were in use centuries ago. Indeed, the first report of the employment of the arm flap for the purpose of restoring a lost nose is contained in Benedictus' work on anatomy (1497).

Within the last decade or two, the possibility of securing cosmetically acceptable results in surgical operations came to be appreciated more widely, and "plastic" surgical work was undertaken deliberately although usually more or less incidentally. It is largely due to the efforts of the author of this book that plastic surgery is coming to be recognized more and more as a definite surgical specialty, and that more and more successful work is being accomplished in this field.

Doctor Davis' book represents the result of his personal experiences for the last ten years and also the principles and methods of plastic surgery elaborated by others.

Owing to the frightful disfigurements suffered by many soldiers during the war, plastic surgery has come to be valued far more highly than ever before and, indeed, it has become an actual necessity. The book is extremely interesting not only for the surgeon but also for the general practitioner who, undoubtedly, should know something about the subject. It is to be hoped that this branch of surgical technic will experience further attention and improvement.



# Condensed Queries Answered

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report their results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

## Answers to Queries

Answer to QUERY 6451—"Anemia of Uncertain Origin."—Referring to Query 6451, on page 674 in the September issue of CLINICAL MEDICINE, I wish to say that I have been practicing fifteen years in South Alabama and West Florida (after ten years' experience in Illinois and Iowa) and that I am deeply interested in the case presented.

As the editor wisely suggests, "with the information supplied, it is difficult to venture a diagnosis." However, the statement regarding sugar being present in the urine seems to me to be rather out of harmony with the rest of the case. Is it a misprint? Does this paragraph belong to another case?

In my long experience in the South, I have studied many cases of anemia in adults and children. I find many causes back of weakness and blood poverty. In my opinion, P. F. L. will do well to examine the urine for albumin, as cases of chronic nephritis may happen here in children. I regard the treatment by means of dilute hydrochloric acid as excellent, but have had better results with it given after meals, rather than before.

Besides malaria, hookworm is a common cause for anemia, in Alabama. Some of the mature worms may be dislodged by a brisk calomel and podophyllin purge, and then found by softening the feces with water and straining through cheese cloth. Or else, the specimen of feces may be sent to the nearest state-board laboratory in order to determine the presence of hookworm eggs.

I have cured some cases of chronic anemia, in children, that were due chiefly to errors in diet causing chronic indigestion. The boy's slow pulse (66) does not suggest a severe degree of anemia. Or,

perhaps, the pulse is slowed by bile retention. (Or is the pulse rate a misprint?) So slow a pulse speaks against tuberculosis. If the report about sugar in urine is correct, in this case, that would, of course, suggest an antidiabetic diet.

In general, I have found it necessary to adopt dieting strictly in accordance with the degree of indigestion present. This 15-year-old boy may require a diet suitable for an ordinary boy of 5 or 6; perhaps even an infant's dietary of milk, buttermilk and fat-free soup might be suitable for three or four weeks.

Of course, if the recent history suggests malaria still being present, the boy needs calomel, quinine and arsenic.

Candy and other sweets clog up the liver and should be stopped. Allow oranges, apples, pineapple juice and lemonade instead.

The recorded observation of the face swelling during sleep suggests kidney trouble. Be sure to examine the urine frequently as to total quantity, specific gravity, high acidity and albumin.

It is to be kept in mind that anemia is often caused by snuff dipping or cigaret smoking.

All correspondents in reporting cases should make complete statements regarding all the vital functions of the body, going over the digestive, respiratory, circulatory and eliminative organs in a systematic manner. Thus, in discussing conditions of respiratory organs, begin at the nose and end with air vesicles and pleura. In describing digestive system, start at tongue and teeth and end at hemorrhoidal veins.

In this way, many a case will clear itself up and a doctor that has been calling for help may easily develop diagnostic skill enough to report cases fully for the en-

lightenment of others.. Thus a "leaner" may become a "lifter." Ella Wheeler Wilcox has written some wonderful poems, but I regard none more highly than the one in which she describes the two great classes in the world, not the rich and poor, not the grave and gay, not the proud and the

humble, not the old and young, but those who lift and those who lean; and she remarks pathetically that there is only one who lifts for twenty who lean. All doctors should be lifters.

HENRY BORST.

Pensacola, Fla.

## Queries

QUERY 6457.—About Dispensing Narcotics." G. L. H., Michigan, asks whether a country physician has the right to leave with his patients cough remedies containing in each pill 1-64 codeine of sulphate, or morphine sulphate 1-100.

In reply to this question, we expressed the opinion that in case of a bona fide prescription, or dispensed remedy, no exception will be taken to the ordering of a reasonable quantity sufficient to last for a few days, though this should in no case be more than is needed from one visit to the other.

In order to make certain, we submitted the question to the Commissioner of Internal Revenue, Treasury Department, Washington, D. C., and received the following reply which we copy verbatim because of the legal importance attaching to the question. The letter received from the Office of the Internal Revenue is as follows:

"Reference is made to your letter of the 25th ultimo, requesting whether it is permissible under the Harrison Narcotic Law, as amended, for a physician to leave with his patients 500 tablets of the following compound:

Codeine sulphate .....	gr. 1-64
Emetoid .....	gr. 1-64
Aconitine hydrobromide .....	gr. 1-3000
Hyoscyamine sulphate .....	gr. 1-4000

"You are advised that this formula indicates clearly that the preparation is intended as a cough remedy, and, as such, it may be permissible for a physician to leave such a number of the tablets with a patient. This office does not attempt to indicate the quantity of narcotic drugs or preparations which may be dispensed or prescribed at a single dispensing or upon a single prescription, or to designate the frequency of such dispensings or prescriptions. The physician who dispenses or pre-

scribes drugs or preparations is primarily responsible and will be held to a strict accountability for any drugs which are found to have been used illegitimately through his dispensing or prescribing.

"The Act does not prohibit the, dispensing or prescribing of narcotic drugs or preparations for the treatment of disease, and the quantity which may be dispensed or prescribed at any one time may vary according to the circumstances attached. Accordingly, it is to be expected that the good faith of the physician dispensing or prescribing the drugs or preparations will govern the quantity and dosage to the extent which seems necessary for the proper treatment of the patient."

QUERY 6458.—"Nuclein in Conjunction with Bacterin-Therapy." O. F. B., Michigan, refers to Query 6433 (July issue), in which the combination of nuclein with bacterin-therapy was considered. Regarding our suggestion to use nuclein hypodermically twenty-four hours after the injection of a bacterin, in order to stimulate the production of opsonins and of phagocytes, so that phagocytosis could occur more readily, the Doctor says:

"Of course, you are aware that the hypodermic use of nuclein is painful. So, I am asking you whether yeast given by mouth would produce the same effect and, perhaps, overcome the leukopenia that so frequently is present in influenza-pneumonia, or at least, was last year. This is in preparation for the coming trouble that we all are expecting.

First of all, we wish to take issue with our correspondent as to the pain declared to attend the hypodermic injection of nuclein-solution. Employing the nuclein-solution specially prepared for hypodermic injection, the present writer has lately pre-

given a great many injections and has heard virtually no complaint; in fact, he has been assured by many patients that the procedure was entirely unobjectionable. There usually follows a very slight swelling, possibly a little discoloration, owing to the mechanical pressure of the injected fluid upon the tissue-cells, but, no reaction occurs, and, certainly, no inflammation nor pain worth speaking about. Of course, the alcoholic solution of nuclein, which is intended for internal administration, is extremely painful when injected hypodermically.

As for substituting yeast taken by mouth, it is true that this will have a similar effect as the nuclein, but, it requires very large doses, say, one to two of the commercial cakes per day, while the effect is not nearly as certain as is that from nuclein hypodermically administered. Furthermore, this effect is not established for some time, probably not earlier than ten days after beginning the course. Hence, we still believe that the hypodermic injection of nuclein-solution, of a proper make, is the most appropriate treatment for the purpose intended.

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QUERY 6459.—“Hypodermic Cathartics.” J. J. M., Illinois, writes: “A colleague recently mentioned a drug that will cause the bowels to act when given hypodermically. Tell me the name of it?”

Probably it was physostigmine salicylate that was suggested by your friend as a hypodermic cathartic. As a matter of fact, this drug, as also arecoline, while acting excellently in veterinary practice, does not prove particularly satisfactory when administered to the average human being. In some instances arecoline produces copious dejections, while, in the case of other individuals, twice the amount of the drug may be given without any effect whatever, and yet other people will suffer severely from headache and nausea.

Physostigmine salicylate (eserine), also, has produced unpleasant symptoms in many instances, but, very rarely satisfactory catharsis. Perhaps the most satisfactory hypodermic cathartic is C. P. magnesium sulphate. The only undesirable features of this are, the somewhat large dose required and the toxicity of this salt when introduced into the blood. Two grains in sterile

solution produce copious dejections within three hours.

Convallamarin, when given in large doses, acts as a purgative; however, it is not safe and is rarely or never administered hypodermically—at least not in such quantities as would produce catharsis.

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QUERY 6460.—“Regrowth of Nails.” M. C. B., Nebraska, is treating a young woman, aged twenty-two years, musician, whose first finger was pinched in a door with the result that the entire nail fell off. The Doctor asks us how “a good natural-looking nail may be made to grow, as the young lady is in great distress over her future.”

In the average case, little or nothing can be done to control the growth of a nail. However, unless the matrix has been very severely injured, the new nail, if taken care of, will assume a natural appearance in the course of time.

If there is an excessive nail growth, it may first be thoroughly softened by means of some hot water in which a little sodium bicarbonate or borax has been dissolved and then carefully cut or filed away. The writer prefers pumice to a file. The subsequent overgrowth should be kept under control with scissors or a sharp knife. If there is a tendency to extreme brittleness or hardness of the nail, a soaking every two or three nights with one of the alkaline solutions named may be tried, the part being subsequently enveloped in a plain unguent, such as cold-cream or just vaseline. If the nail refuses to grow, nothing, of course, can be done to remedy the condition.

You will find a rather interesting chapter on diseases of the nails and the anatomy of the parts in Stelwagon's “Diseases of the Skin.”

Unfortunately, you do not tell us how severely the terminal phalanx was injured or how long ago the accident occurred.

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QUERY 6461.—“Mastisol or Sterisol, or Skin-Varnish.” V. A. G., Illinois, says that, some time ago, there appeared in these pages formulas for a skin-varnish that, applied to pieces of linen or cambric, yielded an excellent surgeons'-plaster, in every way equal to the commercial rubber plasters, that can be detached and reapplied. He has forgotten the copyrighted

(German) name given to this adhesive liquid, consequently can not look up those articles in the annual indexes.

The name referred to is *mastisol* (suggestive of *mastix* and *solution*), but, it also may be traced in the indexes under "Varnish, surgeons' antiseptic" (1914, July, p. 620) and "Varnish, skin, for wounds" (1915, January, p. 60). In the latter volume, it also is listed under "Plaster, liquid, surgeons'." *Steresol* is another proprietary name. This name seems to suggest a liquid solid (plaster?). The foregoing will serve as a pointer to the same matter printed in other volumes of that period.

It may be added that, at that time, these and allied preparations already had attained considerable popularity in the armies of the central empires.

QUERY 6462.—"Herpes Zoster." J. A. C., West Virginia, was, some weeks ago, stricken with a very severe pain along the course of the lower ribs on the left side and in about one week had, extending from the ensiform cartilage to the spinal column, "the most beautiful and compact herpetic eruption ever beheld by mortal eye." "I had," he continues, "enough shingles to roof a dairy-barn and couldn't sell one. However, the rash disappeared in about ten days, but, the pain has persisted, has been of the most excruciating character, so that, since the inception of the trouble, I have not had one hour's ease. I can neither lie, sit, squat or stand in comfort. I have gotten on my knees, stood on my head, lain on my back and on my belly and on both sides, all without getting relief. This thing is getting somewhat monotonous, to say nothing more disrespectful about it. }

"It would be easier to name the things that were not applied, either to the external or the internal economy, than to recapitulate those advocated and tried. The devilish pesticator has gotten away with twenty-two pounds of my good, honest, hard-earned *avoirdupois*. I am sixty-seven and have been diabetic for the past six or eight years, but, without perceptible impairment of the general health. I have always been unusually strong and vigorous. Have been in active and continuous practice for forty-four years; the first twenty-one, village and country.

The last remedy I have resorted to is strontium salicylate and have not had so

severe pain for four or five days. What can you do for me?"

We wish to assure you of our sincere sympathy, for, if there is a despicable, intolerable and intractable disease, it is herpes zoster. The acute stage is bad enough, but, when the pain persists long after the inflammatory patches have disappeared, the patient and his physician alike are liable to lose faith in the value of therapeutic procedures.

It would be useless for us to enter into any discussion of the pathology of this disease; still, we may call your attention to the fact that the prognosis is almost invariably favorable, all the symptoms usually disappearing in from two to four weeks. Unfortunately, however, the duration may be prolonged to one or two months, while the possibility of persistent neuralgia or other sensory and motor disturbances following the eruption has always to be kept in mind.

Bearing in mind the fact that your advanced age and diabetic condition, we should be inclined to prescribe, first of all, a rest, change of air, most careful dieting, and thorough elimination.

As strontium salicylate is proving beneficial, we, certainly, should continue the use of that drug and, in addition, incline to advise taking zinc phosphide, say, 1-6 grain three or four times a day.

The urine should be examined from time to time and a therapeutically clean intestine secured, preferably by the initial use of divided doses of blue mass and soda, followed by sodium sulphocarbonate, in rather full doses, for a week or two, and, later, half the contents of an ampule of *bacillus-bulgaricus* bouillon, morning and night, with 4 ounces of skimmed milk.

The present writer has been able to control the pain, that follows in the wake of shingles, by means of the galvanic current, of one to three milliamperes, applied for five to ten minutes once or twice daily; the positive electrode being placed as near as possible to the main nerve-supply of the part, the negative one being moved gently to and fro over the diseased area.

We sincerely wish that we could offer you something more positive, but, believe that, if you will follow out these suggestions, you not only will get rid of the pain that now tries your Christianity, but, will regain a very large part of your departed *avoirdupois*.